

APRIL 2013

24ColorCard CameraCray.com



LEFT

彩 照

姓名: \_\_\_\_\_  
Name

职务: \_\_\_\_\_  
Post

单位: \_\_\_\_\_  
Unit

No: \_\_\_\_\_ Date: \_\_\_\_\_

装得快 文具

002



REGISTERED AS A NEWSPAPER

TELEPHONE: CENTRAL 3617  
TELEGRAMS: "CHEMICUS,  
CANNON, LONDON" (2 Words)

PUBLISHED WEEKLY AT 42 CANNON ST., LONDON, E.C.4.

SUBSCRIPTION WITH  
DIARY 20/- PER ANNUM  
SINGLE COPIES 9d

No. 2403.

FEBRUARY 13, 1926.

Vol. CIV.

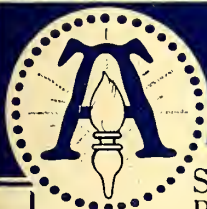


## THE BEST HOUSE FOR ALL PHARMACEUTICAL PRODUCTS

*Proprietors of the "Silver Churn" Dairy Preparations.*

**OLDFIELD, PATTINSON & Co.**

TELEGRAMS: "OPIUM." MANCHESTER.  
PHONES: City 984 & 4038.



Trade  
Mark

## "Torch" Brand EXTRACT OF MALT with COD-LIVER OIL

Sell on quality—it is a better policy than price-cutting. "Torch" Brand Cod Liver Oil and Malt Extract is unsurpassed in quality and packing; it also carries the name and guarantee of Allen & Hanburys Ltd. The prices are protected on a basis that gives satisfaction all round.

*"Torch" Brand Products are supplied to Chemists only*

*A fair Profit  
to the Retailer.*

*A fair Price  
to the Public.*

We help sales by supplying  
artistic 6 page folders for dis-  
tribution and material for an  
attractive Window Display.



### P.A.T.A. Prices

Size	Wholesale per doz.	Retail each
$\frac{1}{2}$ lb. ..	7/7 $\frac{1}{2}$ ..	11d.
1 lb. ..	11/6 ..	1/4
2 lb. ..	20/6 ..	2/6
4 lb. ..	38/6 ..	4/9
7 lb. ..	64/9 ..	8/-

SPECIAL QUOTATIONS FOR  
LARGE QUANTITIES.

**Allen & Hanburys Ltd., Bethnal Green, London, E.2**

Telephone: Bishopsgate 1122 (6 lines).

Telegrams: "Greenburys, Edo., London."



# MAY, ROBERTS' & BULK DRUGS.

The beginnings of this Department of the May, Roberts' Service were very modest, almost casual in fact. Chemists finding themselves in urgent need of a small quantity of a particular drug used to ask us to include it with other goods they were ordering, as they knew by experience that the quickest way to get anything is to ask May, Roberts to get it for you.

In those days we held no stock of Bulk Drugs, but simply sent out a runner to gather them up and popped them into the waiting case at the very last moment. This tendency on the part of our customers became a habit, and we found it necessary to stock certain preparations in common demand, and from that, to buy in bulk, and pack for ourselves. Nowadays we have a whole floor of one of our Clerkenwell Warehouses devoted to this work and a large part of our Works at "Springfield," Clapton, is occupied in manufacturing processes.

Of course we do not profess to manufacture the whole of the 1,200 preparations appearing on pages 304—308 of our General Catalogue, but draw many of them from outside sources. In selecting Suppliers, we choose firms who have specialised in the manufacture of certain classes of pharmaceuticals, firms whose names are well known to every chemist, and their guarantee stands behind ours.

Naturally we put our own name on the containers, because we are not paid to advertise anyone but May, Roberts', but any chemist who buys bulk drugs from us can have the name of the manufacturer of any particular group of preparations for the asking.

Every article supplied by the Department is guaranteed to be in accordance with official requirements, the prices are right and you can have immediate delivery. The reason that we can despatch so promptly, is that the volume of our trade—few chemists suspect how large it is—enables us to standardise packages and in nine cases out of ten it is simply a matter of taking the package off the shelf.

As regards the prices, well, look at your May, Roberts' Catalogue and if you are one of those exceptional chemists who have not one handy

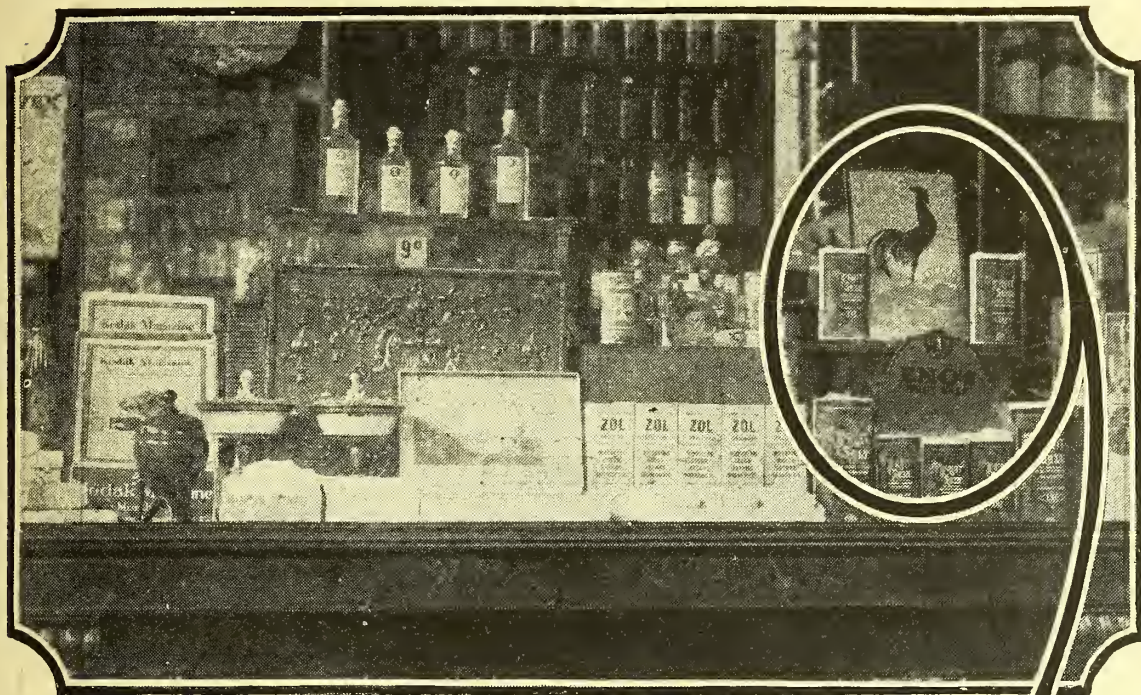
**SEND A POSTCARD FOR ONE NOW.**

---

## MAY, ROBERTS & CO., LTD.

(P.O. BOX 157) 7/13 CLERKENWELL ROAD, LONDON, E.C.1  
And at Liverpool, Plymouth and Dublin.





# It pays to display **ENO'S<sup>®</sup> "FRUIT SALT"** on your counter

**D**uring this season of the year, may we suggest that you would do well to display one or two showcards together with a few bottles of "FRUIT SALT" on your counter.

Very little space is taken up, and profitable sales will be made. There is always a constant demand for "FRUIT SALT," no matter what the season of the year may be. ENO'S "FRUIT SALT" is one of the best advertised lines you handle, and it shows you that liberal profit which makes it really worth displaying.

Applications for new and attractive advertising material should be addressed to Sales Manager :

**J. C. ENO, Ltd.,**

P.O. Box 671  
 London, E.C.4.







**The Sales-Curve usually  
reaches its highest point  
during this month - -**

**T**HERE are few certainties in this world, but the records of many years point to the statement given above.

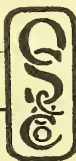
What is the moral? Why, that you, who are in touch with the Public, should redouble your efforts to sell

**Roboleine**  
THE FOOD THAT BUILDS THE BODY

during this fruitful period, for we want you, as an individual pharmacist, to have a record "Roboleine" season, just as we hope to have. A little display, a timely word—and the sale is made. Nothing easier.

**OPPENHEIMER, SON & COMPANY LTD.**  
179 Queen Victoria Street, London E.C. 4.

O &amp; S



# SANTONIN

Referring to our Advertisement  
in this Journal of 5th December,  
1925, we beg to advise that the  
following QUOTATIONS are  
:: now in force:— ::

By individual deliveries of at least

25 Kilos	..	@	£53 10 0	per Kilo.
10 „	..	„	55 0 0	„ „
5 „	..	„	57 0 0	„ „
3 „	..	„	58 0 0	„ „
1 Kilo	..	„	60 0 0	„ „

NET CASH.

In original One Kilo sealed parcels as supplied by  
The Eastern & Russian Trading Co., Ltd.

*Buyers must give a written undertaking not to undersell  
the above schedule of prices. Full particulars from:—*

**CARNEGIE BROS.**

(227 & 229 Essex Road, London, N.1).

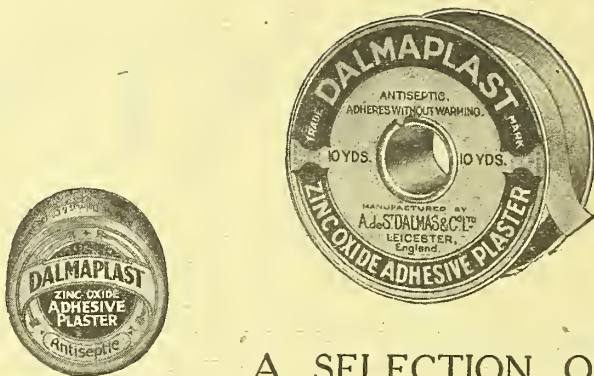
**H. R. NAPP, LIMITED**

(3 & 4 Clements Inn, London, W.C.2).

**OLD STRAND CHEMICAL & TRADING CO. LTD.**

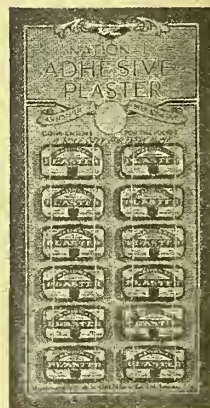
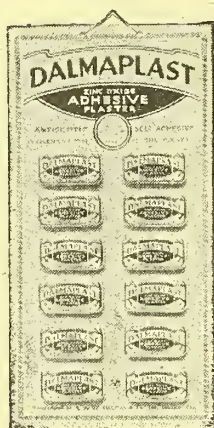
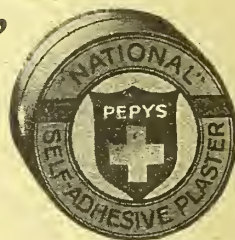
(Audrey House, Ely Place, London, E.C.).





A SELECTION OF

# "ST.-DALMAS" PRODUCTS



The name of  
"ST.-DALMAS"  
has been associated with  
*Plasters of Quality*  
for so many years that our  
brands have become a house-  
hold word amongst chemists  
and the public.

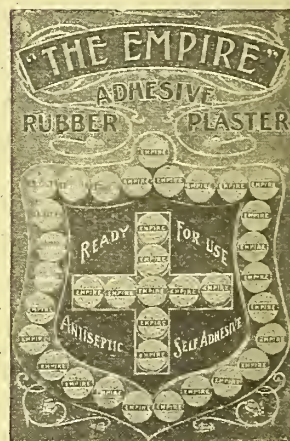
The demand for NATIONAL  
and DALMAPLAST Self-  
Adhesive Strapping is daily  
increasing.

We pack in sizes to suit every  
one of your customers.

Write to-day for Samples and Prices.

**A. DE ST.-DALMAS**  
& CO. LTD.  
LEICESTER.

SELL PLASTERS WITH A REPUTATION.

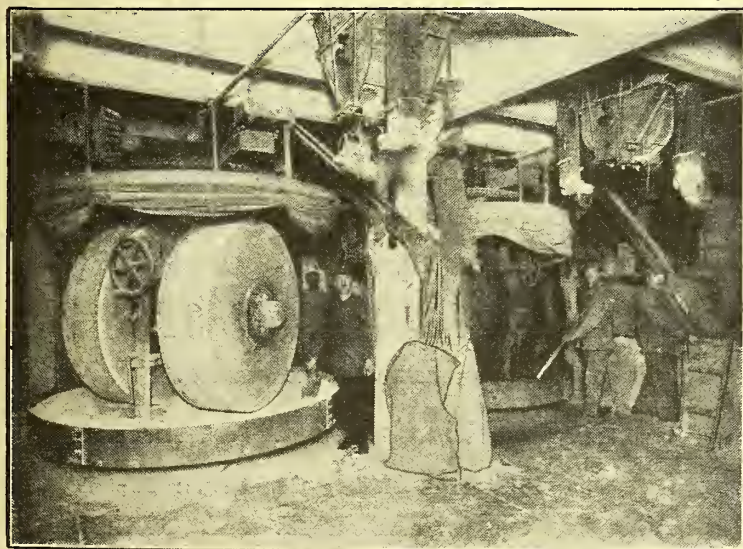




## INDEX TO ADVERTISERS

Acelta Capping Co., Ltd. (Bottle Caps) .....	32	Burroughs Wellcome & Co. (Toilet Lanoline, &c.) .....	47	Ford, Shapland & Co., Ltd. (Toilet Paper) .....	36
Allen & Hanburys, Ltd. (Cod Liver Oil and Malt) .....	Cover	Burt, Boulton & Haywood, Ltd. (Disinfectants) .....	48	Ford, T. H., Ltd. (Surgical Dressings) ..	28
Allen, Stafford, & Sons, Ltd. (Powdered Drugs) .....	5	Butler, E. H., & Son (Drugs) .....	iv	Fowle & Boden, Ltd. (Agency, &c.) ..	xiv
Anglo American Oil Co., Ltd. (Petroleum Jelly) .....	7	Calvert, F. C., & Co. (Disinfectants) ..	xii	Frankenberg, L. (Gillette Blades, &c.) ..	24
Association of Manfg. Chemists, Ltd. Col. Supp.		Cataline Co. (Veterinary Medicines) ..	38	Fuller, R. L., & Co., Ltd. (Quinine Salts) .....	v
Atha, J. W., & Co. (Reflector Lamps) ..	37	Christy, T., & Co. (Grips Pastilles, Py-shan Points Tea, Musterole 42-46-x)		Gardner, W., & Sons (Glos.), Ltd. (Machinery) .....	37
Atkinson, J. & E., Ltd. (Eau de Cologne) .....	15	Chrystoid (Chemists), Ltd. (Sulphur Tablets) .....	6	George, Ernest J. (Valuer, &c.) Col. Supp.	
Bailey, R., & Son, Ltd. (Pneumonia Jackets, &c.) .....	28	Clark's Glycola Co., Ltd. (Shampoo Powders) .....	xvi	Gibbins, R., & Co. (Tablets) .....	ix
Bandoeng Quinine Factories .....	xvi	Cooper Laboratory (Tablets, &c.) .....	ix	Gledhill, G. H., & Sons, Ltd. (Cash Tills) .....	35
Barker, R. W., & Co. .... Leader Page		Coty (England), Ltd. (Face Powders) ..	27	Gough, Kidston & Co. (Petroleum Jelly, &c.) .....	xx
Beaverpuf, Ltd. (Powder Puffs) ....	23	Cox, Arthur H., & Co., Ltd. (Bay Rum) .....	xxiv	Gower, J. (Books) .....	Col. Supp.
Beecham, Thomas (Pills) .....	xiii	Cossons, Sons, & Co., Ltd. (British Industries Fair) .....	43	Grafton Chem. Co., Ltd. (Westons Stop Cough) .....	viii
Beltona, Ltd. (Rheumatic Lotion) ..	x	De St. Dalmas, A., & Co., Ltd. (Plasters, &c.) .....	4	Grout & Co., Ltd. (Crêpe Bandages, &c.) .....	31
Bengue, Dr., & Co. .... Col. Supp.		De Vilbiss Co. (Sprays, &c.) .....	40	Haller & Phillips, Ltd. (Glycerine) ..	ix
Berk, F. W., & Co., Ltd. (Chemicals) ..	ii	Dearborn (1923), Ltd. (Toilet Specialities) .....	22	Hampshire, F. W., & Co., Ltd. (Snowfire) .....	viii
Berton, Arthur, Ltd. (Camera Cases, &c.) .....	29	Debaeq & Harrop (Toilet Preps.) .....	22	Harding, Holland & Fry, Ltd. (Petroleum Oils) .....	xx
Blackie, Robert (Winter Specialities) ..	xvi	Dee Oil Co., Ltd. (Petroleum Jelly) ..	xxi	Harley, T. (Rat Poison) .....	58
Boake, A., Roberts & Co., Ltd. (Perfumery Chemicals) .. Leader Page		Deshell Laboratories, Ltd. (Petrolagar) .....	xi	Harris, J., & Co. (Surgical Rubber Goods) .....	28
Boots Pure Drug Co., Ltd. (Hexyl-Resorcinol) .....	vii	Dick, W. B., & Co., Ltd. (Liquid Paraffin) .....	xxi	Hawker & Botwood, Ltd. (Corvusine D.G.) .....	38
Bourjois, A., et Cie, Ltd. (Vanishing Cream) .....	18-19	Dorin, Ltd. (Beauty Preps.) .....	22	Henry, T. & W. (Calcined Magnesia) ..	vi
Brett & Co. .... Col. Supp.		Dudley & Co. (Cash Tills) .....	41	Higgolene, Ltd. (Skin Ointment) ....	xiv
Bristol-Myers Co. (Sal Hepatica) ..	xv	Econasign Co. (Own Showcards, &c.) ..	12	Hindes, Ltd. (Hair Brushes) .....	35
British and Colonial Druggist, Ltd. (Chemists' Exhibition) .....	39	Edwards, Wm., & Sons (Pasta Mack) ..	22	Hollandsche Melksuikerfabriek .....	xiv
British Diamant Co. (Extract of Malt) .....	16	Ellams & Co. (Labels) .....	xviii	Hough, Hoseason & Co., Ltd. (Manfg. Chemists) .....	Cover
British Drug Houses, Ltd. ("Borocaine," &c.) .....	Cover	Eno, J. C., Ltd. (Fruit Salt) .....	1	Houghton-Butcher (Gt. Britain), Ltd. (Developing System) .....	41
Brook, Parker & Co., Ltd. (Water Glass) .....	34	Essences & Synthetics, Ltd. (Ess. Oils) ..	22	Hovenden, R., & Sons, Ltd. (Perfumery) .....	21
Bromage & Co. (Indian Perfumes) ..	42	Evans, Gadd & Co., Ltd. (Corner's Oils, &c.) .....	34	Hubbuck, T., & Son, Ltd. (Oxide of Zinc) .....	iv
Bull Perfect Syringe .....	31	Evans Sons Lescher & Webb, Ltd. (Drugs and Chemicals, &c.) .....	13	Iglodine Co., Ltd. (Iglodine) .....	xii
Burge, Warren & Ridgley, Ltd. (Aluminium Boxes) .....	xviii	Fairy Dyes, Ltd. (Home Dyes) .....	44	International Laboratories (Parmint. &c.) .....	44
Burkett, Sharp & Co., Ltd. (Chemicals) ..	ii	Farmer, F., & Co. (Rat Poison) .....	38	Itona Products, Ltd. (Vitamine Food, &c.) .....	8-9
Burrough, J., Ltd. (Wines) .. Leader Page		Fennings, A. (Children's Cooling Powders) .....	Leader Page		
		Field, C. W., Ltd. (Saponine Powder, &c.) .....	iv		
		Fink, F., & Co. (Gums) .....	42		
		Folkes, F. W., & Co. (Crêpe Bandages) .....	28		

[Continued overleaf.]



Edge Runners in "StaffAllenS" Mills

## "StaffAllenS" Powdered Drugs

GUM ACACIA  
ALOES  
CAPSICUM  
DIGITALIS LEAVES  
GENTIAN ROOT  
HENNA LEAVES  
JALAP  
NUX VOMICA  
ORRIS ROOT  
RHUBARB  
SENNA LEAVES  
SOAP  
TRAGACANTH

# STAFFORD ALLEN & SONS LIMITED

Manufacturing Chemists

Drug Millers since 1833

Essential Oil Distillers

COWPER STREET, FINSBURY, LONDON, E.C.2



## INDEX—cont.

Jackson, Ernest, & Co., Ltd. (Sulphur Pastilles, &c.) .....	xiii	Papier Poudré, Ltd. (Toilet Preps.) ..	24	Sier, Voss & Tones ("Transparit") ..	35
Johnson & Sons Mfg. Chts., Ltd. (Chemicals) .....	iii	Parke, Davis & Co. (Scarlet Fever Serum) .....	xvii	Simond, S. D., & Co. (Tapon) .....	30
Josephs, Philip, & Sons, Ltd. (Col. Supp.) ..	Col. Supp.	Parkinson's (Sugar-coated Pills) ..	vi	Simplic Soother .....	30
Kerfoot, T., & Co., Ltd. (Sulphur and Lime Fruit Lozenges) .....	17	Patent Phosphates and Merchandise, Ltd. (Chloramine T.) .....	il	Slack, A. Bernard .....	Col. Supp.
Lang, Jules, & Son (Glassware) .....	36	Pazo Co. (Pill Boxes) .....	xviii	Smith, T. & H., Ltd. (Chemicals) ..	v
Langheck & Co., Ltd. (Pliaphane Containers) .....	37	Peat Products (Sphagnol), Ltd. ....	xiv	South of England College .....	xxii
Leichner, L. (Greasepaints) .....	24	Perry & Hope, Ltd. (Sulphate of Soda) .....	vi	Spatula Publishing Co. (Books) ....	41
LePersonne, L., & Co. (Bottles) ..	32	Pharmaceutical Lanoline Co. (Lanoline) .....	35	Spencer, Isaac, & Co. (Aberdeen), Ltd. ....	Leader Page
Lever Bros., Ltd. (Glycerine) ..	ii	Philli-Mirano, Ltd. (Perfumery) ..	23	Spurway et Cie, Ltd. (Ess. Oils) ..	23
Loffhouse & Saltmer, Ltd. (Cod Liver Oil and Malt) .....	16	Potter & Clarke, Ltd. (Asthma Cure) ..	45	Squire & Sons, Ltd. (Books, &c.) ..	xxii
London College of Pharmacy ..	xxii	Price, A. S., & Co., Ltd. (Corks) ..	32	Sterns, Ltd. (Oils, Petroleum, &c.) ..	xix
Macandrews & Forbes, Ltd. (Apollo Liquorice) .....	ix	Provincial Insurance Co., Ltd. Leader Page	40	Suffolk Animal Medicine Co., Ltd. ....	38
McGlashan, D., Ltd. (Abdine) ..	xvi	Pulzer, S., & Son, Ltd. (Goggles) ..	40	Surgical Hosiery Co., Ltd. ....	28
MacLellan, G., & Co., Ltd. (Surgical Rubber Goods) .....	42	Quilliam, J., & Co. (1923), Ltd. ....	30	Sutley & Silverlock, Ltd. (Bottle Wrappers, &c.) .....	xxiii
MacSwenny, B. (Tinori Corn Cure) ..	28	(Surgical Goods) .....	30	Swales, Thomas (Bottles, &c.) ..	32
Mandall & Co., Ltd. (Licorine) ..	viii	Rayner & Co., Ltd. (Olive Oil) .....	xix	Tatcho-Tone Co. ....	42
Marsden, Chas. C. (Valuer, &c.) Col. Supp.	32	Redgrave, Butler & Co. (Russolax) ..	xix	Tomlinson & Hayward, Ltd. (Water-glass, &c.) ..	38
Maud, F. (Showcases) .....	35	Relief Home Massager .....	28	Towle, A. P., & Son (Chlorodyne) ..	42
Maw, S., Son & Sons, Ltd. ....	11	Reynolds & Branson, Ltd. ....	Leader Page	United Chemists' Association, Ltd. ....	48
Mawson & Proctor, Ltd. (Majax) ..	xvi	Rigby Battcock, Ltd. (Hairbrushes) ..	40	(Bronchial Lozenges) .....	48
May, Roberts & Co., Ltd. (Bulk Drugs, &c.) .....	Cover	Roberts' Patent Filling Machine Co. ....	xxi	Van Der Hoeks (Bottles) .....	xviii
Meade-King, Robinson & Co., Ltd. ....	xx	Roberts & Sheppey (Melrose Tablet) ..	42	Venesta, Ltd. (Collapsible Tubes) ..	xxiii
(Petroleum Jelly, &c.) .....	xx	Robinson & Sons, Ltd. (Boxes) ..	Leader Page	Vinolia Co., Ltd. (Toilet Products) ..	25
Melin, C., & Co. (Flasks) .....	30	Rose, J. L., Ltd. (Pyrogallie Acid) ..	vi	Viscose Development Co., Ltd. (Bottle Cappings) .....	32
Menley & James, Ltd. (Tablets) ..	vi	Rudduck & Co. (Shopfittings) ..	42-Col. Supp.	Wampole, H. K., & Co., Ltd. (Pharm. Products) .....	xiv
Mentholatum Co., Ltd. ....	xii	Saltrates, Ltd. (Reudel Bath Saltrates) ..	26	Warrington Chem. & Drug Co. ....	ii
Millar, A., & Co., Ltd. (Orange Wine) ..	42	Sandoz Chemical Co., Ltd. (Alkaloids) .....	iii	Watts, J. (Safety Razor Blades) ..	24
Mills, A. J., & Co., Ltd. (Honey) ..	16	Santonin .....	3	Westminster College of Pharmacy ..	xxii
Milners Manfg. Chemists (Seidlitz Powders) .....	xiii	Schimmel & Co. (Perfumery Products) ..	14	Wheeler & Hunsing, Ltd. (Ess. Oils, &c.) ..	14
Morgan-Davis & Sons (Trusses) ..	31	Schutze, F., & Co., Ed. (Solid Face Powders, &c.) ..	42	Whitaker & Co. (Hat Dyes, Household Dyes) ..	10
National Cash Register Co., Ltd. ....	12	Scruton, Oscar, & Co. (Nurse Harvey's Mixture) ..	32	Wilcox, Jozean & Co. (Foreign Medicines, &c.) ..	Leader Page
National Drug & Chemical Union ..	Col. Supp.	Scurr, C. A. (Optical Tuition) ..	xxii	Willows, Francis, Butler & Thompson Ltd. (Galenicals, &c.) ..	iv
Newball & Mason (Waterglass) ..	57	Shadeine Co. (Hair Dyes) .....	42	Wood Bros. Glass Co., Ltd. (Glass Containers) .....	53
Oldfield, Pattinson & Co. (Pharm. Preps.) .....	Cover	Shawyer & Co. (Developing, &c.) ..	41	Wood, Vincent (Bandages) ..	42
O-Pine-O Manfg. Co., Ltd. (Toilet Preps.) .....	42	Sherborne, T., & Co., Ltd. (Surgical Appliances) ..	42	Youldon, F. (Bottles) .....	xviii
Oppenheimer, Son & Co., Ltd. (Robo-leine) .....	2	Sherley, A. F., & Co., Ltd. (Dog Medicines) ..	41	Zeal, G. H., Ltd. (Clinical Thermometers) ..	31
Orridge & Co. (Valuers, &c.) Col. Supp.	12	Showcard Specialists, The .....	12		

THESE ARE THE ACTUAL SIZES OF THE TABLETS



## WE CAN SATISFY EVERY REQUIREMENT FOR SULPHUR TABLETS

THREE FLAVOURS: ORANGE - LIME-FRUIT - RASPBERRY.

TWO VARIETIES: MADE WITH PRECIPITATED OR FLOWERS OF SULPHUR, BOTH CONTAIN CREAM OF TARTAR, B.P.

THREE SHAPES: ROUND - LARGE AND SMALL AND LOZENGE SHAPE.

## ALL ORDERS SUPPLIED FROM STOCK

*Write for samples and compare the quality.*

MADE WITH PRECIPITATED SULPHUR, B.P.

7 lbs. at 1/3. 14 lbs. at 1/2. 28 lbs. at 1/1. 56 lbs. at 1/- . 1 cwt. at 11d. per lb.

MADE WITH SUBLIMED SULPHUR, B.P.

7 lbs. at 1/1. 14 lbs. at 1/- . 28 lbs. at 11d. 56 lbs. at 10d. 1 cwt. at 9d. per lb.

SHOWCARDS AND CARTONS FREE WITH ALL ORDERS

1 gross cartons with 28 lbs. of Tablets.  
£2 parcels sent carriage paid to your door.

# CHRYSTOID (CHEMISTS) LTD.

## 1-3 Gower Street, BOOTLE, LIVERPOOL

Telegrams: "Bluechrys, Liverpool."

Telephone: Bootle 126.



# "Specialty" PETROLEUM JELLY



## QUALITY — PURITY — PRICE

Three things keen buyers look for. Because we are one of the largest importers of Petroleum products we are able to supply Petroleum Jellies which in these and all other respects are unequalled. "Specialty" Petroleum Jellies are supplied in white and yellow; and packed in 1 lb.,  $\frac{1}{2}$  lb., &  $\frac{1}{4}$  lb. decorated tins.

**SOLD ALSO IN BULK—**

in 7-lb., 14-lb., and 28-lb. tins and in 3 $\frac{1}{2}$ -cwt. barrels.

Send a postcard for samples and prices. Attractive showcards supplied.

## SPECIALTY DEPT.

ANGLO-AMERICAN OIL CO., LTD.

*Sempolia Works*

ALBERT ST., CAMDEN TOWN, LONDON, N.W.1

Telegrams :  
"Nufinjol, Norwest  
London."

Telephones :  
Hampstead 4046  
and 4047.



# 60% PROFIT AND

**A Valuable Food Beverage you can sell  
with confidence under your own name**



## Malt, Milk & Egg Beverage

*(Deliciously flavoured with cocoa).*

Supplies vital nutrient and nerve-building elements not present in Tea, Coffee or Cocoa. A scientific concentrated combination of the choicest Malt, Milk and Eggs. It is easily assimilated and of extraordinary tonic value. Of exquisite flavour, it is intended for regular use with meals and is invaluable in illness, convalescence, childhood and old age. Promotes alertness and efficiency and **ensures healthy sleep.**

**You get all the credit and profit. The results are  
satisfactory both to your customers and yourself.**

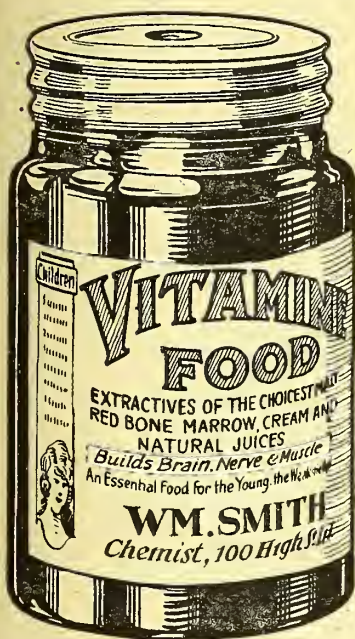
*Prices and further particulars on request.*

**EXPORT ENQUIRIES INVITED FROM  
SHIPPING & OTHER AGENTS.**

# ITONA Products Ltd., LEEDS

# NON-PROPRIETARY!

**Sell this Vitamine Food  
as Your Own and reap the benefit**



## Vitamine Food

A superior extractive of the choicest Malt, Red Bone Marrow, Cream and Natural Juices. Medically recommended and the result of research which revolutionises the problem of the treatment of malnutrition, loss of weight, neurasthenia, and all nervous troubles.

This food effectively fortifies the system against chills, colds, and epidemic diseases, contains all the Vitamines, A. B. & C., in addition to other powerful nutrients, being a combination of scientific extractives from Vegetable and Animal products of the richest known Vitamine Content.

A non-proprietary article with all the valuable properties associated with this class of food.

*Prices and further particulars on request.*

**EXPORT**

**ENQUIRIES INVITED FROM  
SHIPPING & OTHER AGENTS.**

**MONA Products Ltd., LEEDS**





## The 1926 Whitaker Girl and the 1926 WHITAKER OFFER

If you have not received a copy of the New Whitaker Price List please write to us at once and a copy will be sent by return of post. This Book, entitled "Whitakers and the Chemist 1926," contains a beautiful coloured illustration of the "Whitaker Girl," who will be the pictorial feature of our 1926 Advertising Campaign.

### 'LUTON'

#### STRAW HAT DYES.

The outcome of 45 years' accumulated experience in the manufacture of household dyes. This series comprises all colours and is in demand practically all the year round. They are all highly efficient dyes and appeal to every woman on economical as well as fashionable grounds. Supplied in dull or glossy series.

### 'LUTON'

#### FABRIC DYES

##### HOT WATER.

The best hot-water dyes for all materials, giving perfect results with the minimum of trouble. As with all other Whitaker products, they show a good profit.

Still more important, you will find full particulars of one of the most generous and far-reaching Special Discount Offers ever made to the Trade. It has always paid to Stock Whitaker Products—this year you will do so on still more profitable Terms. Remember, if the Book has not yet reached you—*drop us a line to-day.*

### Auroral

#### COLD WATER DYES.

*Just the thing for Dyeing Dance & Party Frocks*  
Good trade should be done in this line now by recommending it for this purpose to your customers. Recognised as the finest cold-water dyes in the world for delicate and costly fabrics. Good results obtained even at the first trial. A certain seller.

### VELT

#### THE NEW CLEANER

A cleaning preparation for removing stains, grease, dirt, etc., from clothing, upholstery, curtains, etc., and renovating them. VELT is a non-inflammable liquid and is supplied in screw tins of which three dozens are contained in an attractive outer. A new Whitaker product, but nevertheless one which is already selling well. It is now available in 5-oz., 10-oz., and 20-oz. tins for the convenience of bigger users.

ALL CASES AND CONTAINERS FREE.

## WHITAKER & CO. Dye Specialists for Chemists, KENDAL

Telegrams: "Dullette, Kendal."

(Established 1878.)

Telephone 214.

London Office  
and Showrooms:

61 & 62 Craven House, KINGSWAY, W.C.2

Telephone:  
Gerrard 1774.

Maw's



Page

## Bad Weather—Good Business in Maw's Drip - Feed Lamp.

Every season our Drip-Feed Vapor Lamp becomes more and more popular. The recurring epidemics of influenza, whooping cough and other winter ailments have made it almost indispensable to the average household.

A worried mother will often go to her chemist for advice because her child has such difficulty in breathing at night, and in such cases Maw's Drip-Feed Lamp should be recommended. For efficiency, safety and convenience it is without equal.



Last season we added a further improvement to the lamp. It is an adjustment for the night light. Some night lights burn better than others and therefore vaporise the liquid more satisfactorily. With a weak night light the lamp does not vaporise so well. The simple spring arrangement by which it is possible to move the night light closer to the vaporising tray thus accelerates the vaporisation.

Maw's Aero-Cotarol which is sold in conjunction with the Drip-Feed Lamp is a line which brings in constant repeat business and it carries a profit which makes it well worth while.

### PRICES.

	Wholesale.	Retail.
<b>Drip-Feed Lamp</b>	20/- doz.	2/6 each.
In 3 doz. lots ..	19/- ..	.. ..
<b>Aero-Cotarol</b>		
Large size ..	18/- ..	2/3 per bottle.
Small size ..	10/- ..	1/3 ..

Night Lights specially suitable for the Drip-Feed Lamp. In boxes of six. Per-dozen boxes, 6/-. Maw's Drip-Feed Lamp is protected by Patents No. 170463 and 12483-24.

**S. Maw, Son & Sons, Ltd.,**  
Aldersgate St., London,  
and Barnet.





OUR MOTTO TO PLEASE

A LONG FELT WANT

The "ECONASIGN" will save you MANY POUNDS

SIMPLE TO USE

SPRING MILLINERY NEWEST STYLES

NEW LAID EGGS 2/6 DOZ

PURE SILK HOSE 10/6 Pair

GREAT REDUCTIONS

CHEDDAR CHEESE

HATS BARGAINS

MOTOR CARS FOR HIRE

FRESH DAIRY CREAM DAILY

"The Gateway to Success"

ADVERTISE YOUR GOODS

**"THE ECONASIGN"**

WILL PRINT YOUR OWN SHOWCARDS, PRICE TICKETS, LABELS, ETC., AT INFINITESIMAL COST

ESPECIALLY USEFUL TO CHEMISTS

THE "SUPER" OUTFIT - - 60/- post free

THE "BIJOU SUPER" OUTFIT 32/6 " "

NO. 1 OUTFIT - - - - - 25/- " "

WRITE FOR SPECIMENS

**THE ECONASIGN CO.,**  
94 Jermyn Street, Piccadilly, London, S.W.1

Waldorf The Grand Hotel

SWAN INK

BLACKBIRD

Supreme

TYPE SECURITY

NUPINES

MALT EXTRACT WITH COD LIVER OIL

SWAN INK

BLOND

**Efficient Display**

**NEW "STAND-SHOWCARD"**

NO STRUT NO GLUE

**Cut in one piece. Self-fixing. Pack flat.**

YOUR CARDS WILL BE USED — YOUR GOODS, DISPLAYED.

OVER 1,000,000 USED BY LEADING MANUFACTURERS.

Phone: Clerkenwell 283. Patentees & Makers

**The SHOWCARD SPECIALISTS**  
115 OLD STREET, LONDON, E.C.1

BOOTH'S DRY-GIN

POPPY

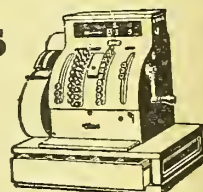
TUNGSTALITE CRYSTAL

ARMY CLUB

EASTERN EXAM

Send for Particulars

## Opportunities for Retailers



We often take back used Cash Registers when customers are installing larger or more up-to-date machines. These National Cash Registers

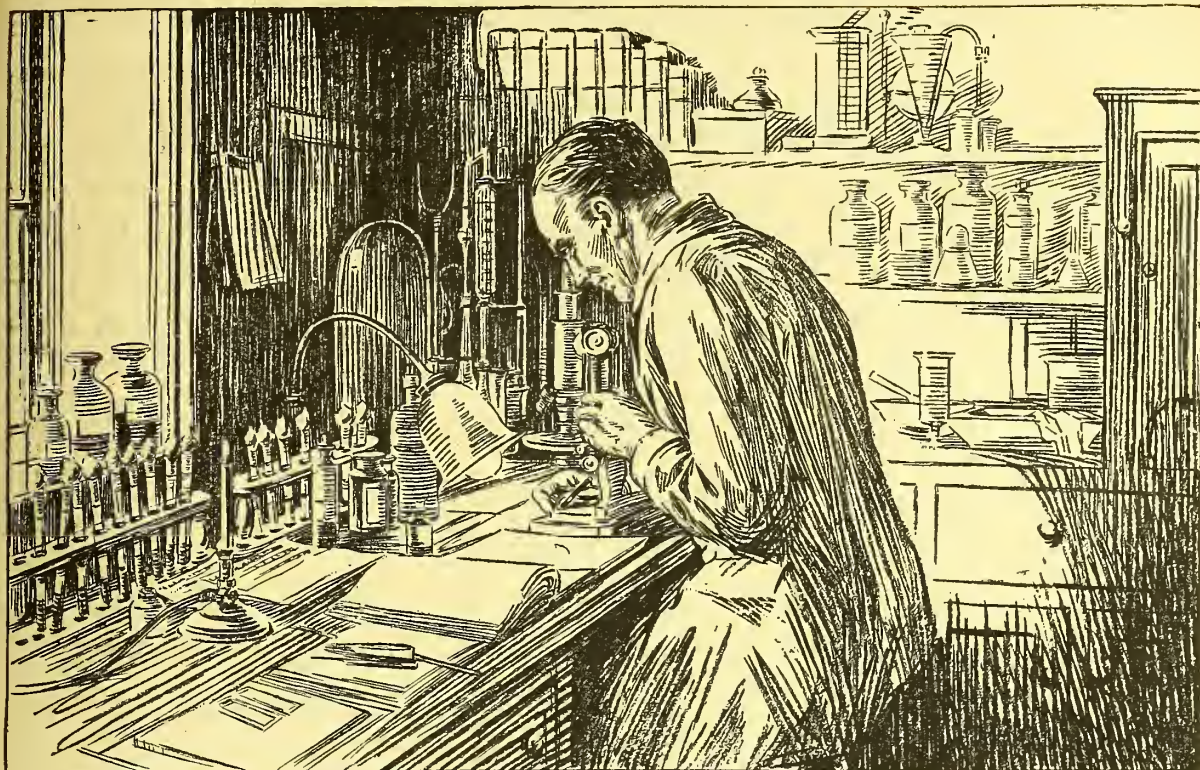
### Thoroughly Overhauled and Rebuilt

are sold under the Company's full guarantee at reduced prices.

Write for details of "Nationals" available

Dept. R.2, The National Cash Register Co. Ltd.  
225 Tottenham Court Rd., London, W.1.





## DRUGS AND FINE CHEMICALS

Build up and maintain a reputation for a high standard of quality by relying upon Evans' warranty. Everything we make is subjected to searching tests and severe analytical control.

# Evans

**EVANS SONS LESCHER & WEBB, LTD.**  
LIVERPOOL      New York      LONDON



# CALIFORNIA

Is celebrated for its

## ORANGE

Groves and the Exquisite Flavour of its fruit. It is not to be wondered at, therefore, that the

## OIL

from these fruits has a DISTINCTIVE and TRUE

## ORANGE FLAVOUR

The price is equally attractive. You can prove it if you will ask your Dealer.

Wholesale Distributors for  
THE EXCHANGE ORANGE PRODUCTS CO.  
CALIFORNIA

WHEELER & HUISKING Ltd.  
26/27 GREAT TOWER STREET, E.C.3

# Schimmel & Co.

MILTITZ, near LEIPZIG.

Manufacturers of

## ESSENTIAL OILS, ESSENCES & AROMATIC CHEMICALS

Speciality :

**FIXORESIN**

A fixing Agent for  
Soap Perfumes and Extractions.

In Various Aromas.

SAMPLES ON APPLICATION.

PEPPERMINT OIL, B.P.

SAVIN OIL

PINE OIL

SAFROL

BENZALDEHYDE, F.F.C.

FLORAL OILS

ESSENCES FOR LIQUEURS

FRUIT ESSENCES, etc.

SOLE AGENTS FOR THE U.K.

FREDK. BOEHM LTD., 15/17 Jewry St., LONDON, E.C.3

## PRICE ANNOUNCEMENT

# ATKINSONS

"GOLD MEDAL"

# EAU DE COLOGNE

BRITISH AND BEST.

**O**WING to increasing Costs of Production ATKINSONS announce that on and from February 12th the Minimum Retail and Wholesale Prices will be advanced as follows:—

### SPRINKLER BOTTLES

	Minimum Retail	Wholesale Per doz.
1 OZ. -	2/6	20/-
2 „ -	4/9	38/-
4 „ -	8/9	70/-
7 „ -	15/-	120/-
9 „ (Stop- pered) -	20/-	160/-

### WICKERED FLASKS

	Minimum Retail	Wholesale Per doz.
1 OZ. -	2/9	22/-
2 „ -	5/3	42/-
5 „ -	11/6	92/-
10 „ -	22/-	176/-
20 „ -	42/-	336/-

THESE PRICES SHOW THE EXCELLENT PROFIT OF **33<sup>1</sup>/<sub>3</sub>%**

AN EXTRA 2<sup>1</sup>/<sub>2</sub>% IS ALLOWED ON £5 ORDERS.

# J. & E. ATKINSON LTD.

EONIA WORKS

SOUTHWARK PARK ROAD - - - LONDON, S.E.16



# PURE MALT EXTRACT

with *FINEST*

## NORWEGIAN COD LIVER OIL

*The Brand that does not separate nor crystallize.*

*Your own name and address on labels. In English jars, etc. Direct from the actual manufacturers.*

**THE BRITISH DIAMALT COMPANY**  
SAWBRIDGEWORTH - - - HERTS.



### Build up a Profitable HONEY TRADE

The delicious flavour of this thick, "set" creamy

**NEW ZEALAND**  
*'Imperial Bee'* **Honey**

is irresistible. Sell it and reap a crop of repeat orders. It is a BRITISH EMPIRE PRODUCT THROUGHOUT, and is GUARANTEED PURE and WITHOUT PRESERVATIVES.

CASES per dozen, carriage paid.

48 1's Glass Screw-top Jars	.. . . .	at 14/-
48 1/2's Glass Screw-top Jars	.. . . .	at 8/6
48 1's Monopots	.. . . .	at 12/6
48 1/2's Monopots	.. . . .	at 7/3

If you cannot obtain supplies through your wholesaler, write to

**A. J. MILLS & CO., Ltd.** (Produce & Canned Goods Dept.), 14 Tooley St., London, S.E.1

**LOFTHOUSE & SALTMER, L<sup>td</sup>**

*Manufacturing Chemists,*

**HULL.**



**PREPARED** with finest Barley Malt and Pure Norwegian Cod Liver Oil. Manufactured under the most up-to-date hygienic and reliable conditions.

**ENQUIRIES SOLICITED.**



**SPRING WILL SOON BE HERE!**

*—and a bold display of*

## **SULPHUR and LIME FRUIT LOZENGES**

*will attract favourable notice*

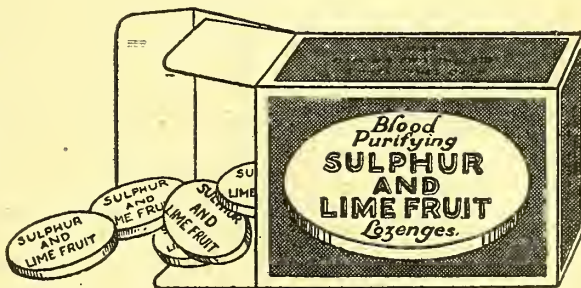
Seasonable Displays are always profitable, and by ordering these Lozenges now you will be ready for the coming of Spring.

The Lozenges are hand-made, pleasantly flavoured and delightfully smooth to the taste. With the outfit of showcards, cartons and display jar supplied free an effective window show can soon be set out.

### **Free Cartons and Display Material**

With orders for 28 lbs. we send this set of showcards, a 4lb.globe-stoppered display jar and 250 retailing cartons.

Per **1/4** lb.



**THOMAS KERFOOT & CO LTD**  
BARDSLEY VALE, LANCASHIRE,  
& Bardsley House, London, N.1  
ESTABLISHED 1797.

B/233

COPYRIGHT



# Another Bourjois

PARIS

*Ashes of Roses*  
· VANISHING CREAM.

The 1/3 size is the newest of this wonderful series and has been specially packed to appeal to the woman of discrimination. Exquisitely perfumed with the famous *Ashes of Roses*



# Success

## Ashes of Roses

(BOURJOIS-PARIS)

### VANISHING CREAM

# 1/3

This new *Ashes of Roses* line at the popular price of 1/3 marks an event in the Vanishing Cream trade. The finest quality Vanishing Cream. Packed in the most attractive carton.

In the well-known *Ashes of Roses* green and gold colourings. In dainty opal pot. Ready for distribution now. Orders can be received in any quantity.

#### HOW TO ORDER.

Order this new *Ashes of Roses* Vanishing Cream as

No. 2525 <i>Ashes of Roses</i>	} at 10/- per dozen.
No. 5008 <i>Ashes of Violets</i>	

P.A.T.A. 1/3 P.A.T.A.

A. BOURJOIS et CIE. LTD.

London: 4 Water Lane, E.C.4.

Paris.

Sydney. -

Wellington.

New York.





# DEARBORN (1923) LTD.

37 Gray's Inn Road, London, W.C.1

## Toilet Specialties.

	Price per doz. to Retailer	Selling Price P.A.T.A.
<b>PILENTA SOAP</b> .. ..	10/-	1/-
A complexion soap.		
<b>PROLACTUM</b> .. ..	10/-	1/-
For the lips.		
<b>PARSIDIUM JELLY</b> .. ..	10/-	1/-
For wrinkles.		
<b>ALLAGITE OF ORANGE</b>		
<b>BLOSSOM</b> .. ..	22/6	2/6
A dressing cream.		
<b>BORANIUM</b> .. ..	22/6	2/6
A hair tonic.		
<b>CLEMINITE</b> .. ..	22/6	2/6
For a face lotion.		
<b>COLLIANDUM</b> .. ..	22/6	2/6
For a face tint.		
<b>PERGOL</b> .. ..	22/6	2/6
A deodorant.		
<b>TEKKO PASTE</b> .. ..	22/6	2/6
Camphor cream.		
<b>STALLAX</b> .. ..	13/6	1/6
For a shampoo.	22/6	2/6
<b>JETTALINE</b> .. ..	31/6	3/6
For clearing the skin.		
<b>PHEMINOL</b> .. ..	36/-	4/-
A depilatory.		
<b>MENNALINE</b> .. ..	36/-	4/-
For the eyelashes.		
<b>MERCOLIZED WAX</b> .. ..	18/-	2/-
A face cream.	31/6	3/6
<b>STYMOL</b> .. ..	36/-	4/-
For oily complexions and blackheads.		
<b>SILMERINE</b> .. ..	22/6	2/6
Hair-curling fluid.		
<b>BARSYDE</b> .. ..	22/6	2/6
Dandruff eradicator.		
<b>TAMMALITE</b> .. ..	22/6	2/6
For grey and faded hair.		
<b>LIQUID PERGOL</b> .. ..	31/6	3/6
To check excessive perspiration locally.		
<b>BICROLIUM</b> .. ..	22/6	2/6
For whitening the hands.		
<b>COCONOIDS</b> .. ..	31/6	3/6
For figure development.		

### The Products of

Messrs. PARKER, BELMONT & CO.

<b>CLYNOL BERRIES</b> .. ..	36/-	4/-
For obesity.	58/6	6/6
<b>SOFT PALERIUM</b> .. ..	45/-	5/-
For wrinkles.		
<b>LIQUID NAIL POLISH</b> .. ..	10/-	1/-
Brilliant and lasting.		

Stocked by ALL Wholesale Houses.

### COLONIAL DEPÔTS AND AGENCIES.

*Australia:* ALL WHOLESALE, & DEARBORN (Australia), Ltd., Grace House, Clarence Street, Sydney.  
*South Africa:* LENNON, Ltd., Cape Town, etc.  
 SIVE BROS. & KARNOVSKY, Johannesburg.  
*India:* FRAMJEE & SON, Bombay.  
 A. L. CHOUDRY, Calcutta.  
*New Zealand:* SHARLAND & CO., Auckland and Wellington.  
*South America:* DEARBORN (South America) Ltd., Calle Pávon 2100, Buenos Aires.  
*Straits Settlements & Federated Malay States:* MEDICAL HALL, Ltd., Singapore.

# The Chemist & Druggist COMPACT LIBRARY

## THE ART OF DISPENSING.

A treatise on the Methods and Processes involved in Compounding Medical Prescriptions, with Dictionaries of Incompatibles and New Remedies, and numerous Memoranda for Dispensers and Prescribers (Ninth Edition, 1921). By PETER MacEWAN, F.C.S., Pharmaceutical Chemist. (New Edition in course of preparation.)

## VETERINARY COUNTER PRACTICE.

An indispensable book for chemists, whether urban or rural. It deals with the ailments of horses, cattle, sheep, pigs, dogs and poultry. The seventh edition (1920), like its predecessors, is by an experienced M.R.C.V.S. Contains 440 pages. Price 7s. 6d. net, by post 8s.

## PHARMACEUTICAL BOTANY.

A new book written especially for students preparing for the qualifying examination of the various pharmaceutical societies of the British Empire. Over 200 illustrations. (First Edition, April, 1925.) Price 5s., by post 5s. 4d.

## CHEMISTS' WINDOWS.

An illustrated treatise on the art of displaying pharmaceutical and allied goods in chemists' shop windows, with Chapters on ticket writing, the mechanics of moving devices and business-promoting accessories. Contains 216 pages and 200 illustrations. Price 3s. 6d., by post 3s. 9d.

## DISEASES AND REMEDIES.

Chemists and druggists need to know something about diseases and their treatment, and this book fills the gap between books of domestic medicine and standard works for medical practitioners. It has been brought up to date and enlarged to 204 pages. (6th Edition, 1921.) Price 5s. net, by post 5s. 3d.

## GUIDE TO PRELIMINARY EXAMINATIONS.

Deals with English, Latin, Arithmetic, Algebra, Euclid, and French, as required in the principal examinations recognised by chemical, medical, and pharmaceutical bodies. (4th Edition.) Price 3s. 6d. net, by post 3s. 9d.

## MINOR EXPERIENCES.

Gives over fifty candidates' descriptions of the Minor Examination as conducted by the Boards of Examiners in London and Edinburgh, prefaced by the official syllabus and other useful information. Indispensable to all chemists' apprentices and assistants who have not qualified, as it is the only book giving the questions and work of the Examination. Contains 116 pages. Price 2s. 6d. net, by post 2s. 8d.

## PRACTICAL METHODS OF URINE ANALYSIS.

This department of chemistry is one which those behind the drug counter can profitably cultivate. The object of this book is to give chemists exactly the information they want on the subject. The book is written by a working pharmacist who is expert in the subject, and has been revised by a M.B. Lond. Price 3s. 6d. net, by post 3s. 8d.

## THE CHEMISTS' DICTIONARY OF MEDICAL TERMS AND TREATMENT.

This book measures 5½ inches by 3½ inches, and contains 283 printed pages. There is no medical dictionary so compact which gives so much up-to-date information. It goes straight to the point—which is what chemists most need when they have to answer medical questions asked by customers. Price 3s. 6d., by post 3s. 8d.

## PROVINCIAL HOSPITAL PHARMACOPEIAS.

Uniform with the "Chemists' Dictionary," contains 296 pages and consists of formulas for medical prescriptions used in twenty-two hospitals and infirmaries in Great Britain outside the London District. Price 3s. net, by post 3s. 2d.

## WOOTTON'S CHRONICLES OF PHARMACY.

In two vols., maroon cloth, comprising 770 pages. Price 10s. 6d. net, by post 11s. 3d.

Published by "THE CHEMIST & DRUGGIST,"  
42 CANNON STREET - LONDON, E.C.4

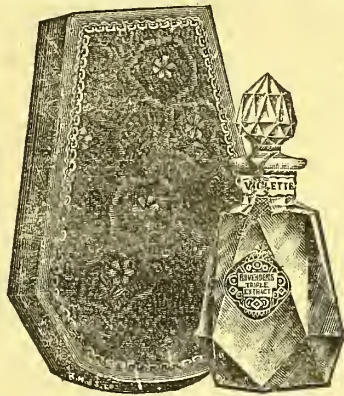
Branch Offices: Manchester and Sheffield, England.  
Melbourne and Sydney, Australia.



# HOVENDEN'S PERFUMERY



No. 1166. (As illustration.)  
Containing 2½ oz. (about).  
Fancy Bottle, Best Triple Perfume,  
Handsome Case, lined, 8/3 each.



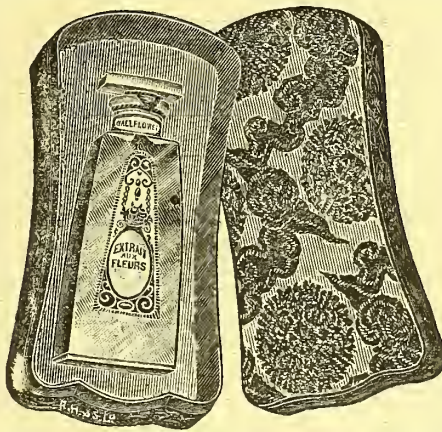
No. 2316. (As illustration.)  
Containing 1½ oz.  
Cut Stoppered Bottle, best Triple Per-  
fume, Handsome lined Case, 6/3 each.



No. "C." (As illustration.)  
Containing 1 oz.  
Fancy Bottle, Good Perfume, 18/6 doz.



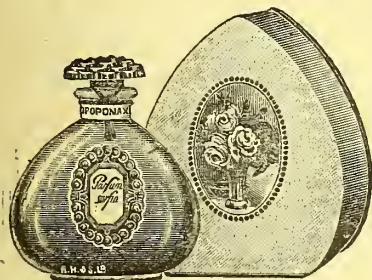
No. 5534c. (As illustration.)  
Containing 1½ oz. (about).  
Gilt Cap Bottle, French Blend  
Perfume, in attractive Case,  
5/9 each.



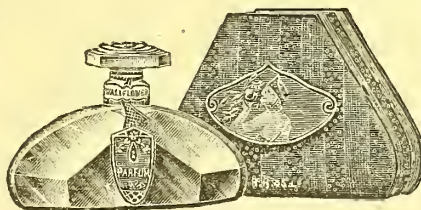
No. "B." (As illustration.) Containing 2oz.  
(about). Fancy Bottle, Good Perfume, 30/- doz.



No. 6830. (As illustration.)  
Containing 1 oz. (about).  
Plain Stoppered Bottle, best  
Triple Perfume.  
Very smart Case, 37/6 doz.



No. 5089. (As illustration.)  
Containing 2 oz. (about). Fancy Bottle,  
Good Perfume, 30/- doz.



No. 3853. (As illustration.)  
Containing ¾ oz. (about). Fancy Bottle,  
Good Perfume, 22/6 doz.



No. 10793. (As illustration.)  
Containing 1 oz. (about).  
Fancy Stoppered Bottle, best Triple  
Perfume, Pull-off Case, 33/6 doz.

We have a large selection of Fancy Cut Glass Bottles from 16/- doz.  
up to 78/- doz., and shall be pleased to forward selection on approval.

**R. HOVENDEN & SONS, LTD.**

29, 30, 31, 32 and 33 BERNERS ST., OXFORD ST., W.1. Tel.: Museum 2310 (3 lines).  
89, 91, 93 and 95 CITY RD., FINSBURY, E.C.1. Tel.: Clerkenwell 7601, 7602, 7603 (3 lines).  
Factory: 41 to 53 BRITANNIA ROW, ISLINGTON, N.1.



# ESSENCES & SYNTHETICS, LTD.

WM. C. SLATER,  
Managing Director.  
ROYAL 290.

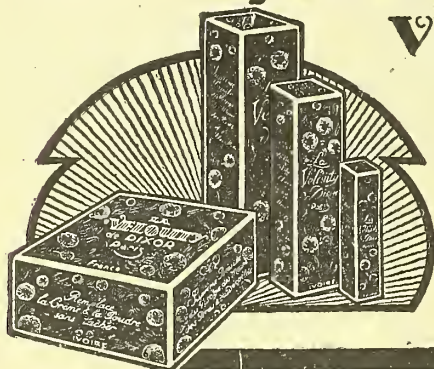


4 Carlisle Avenue,  
E.C.3.  
"ESSYNTHET, ALD, LONDON."

## NEW CROP OTTO OF ROSE

GUARANTEED PURE AND DISTILLED BY  
**BOTU PAPPAZOGLOU & CIE, Kazanlik**  
NOW AVAILABLE.

PLEASE WRITE FOR PRICES AND SAMPLES.



### VELOURY de DIXOR PARIS .. COMBINED CREAM AND POWDER

The advertised line that you are asked for  
DAINTY PRESENTATION

Samples free upon receipt of tradecard or billhead

Prices:—Full size pot	21/- doz.	Retail	.. ..	2/9
Super Tube	22/- "	"	.. ..	3/-
Large "	14/- "	"	.. ..	2/-
Handbag "	3/- "	"	.. ..	6d.

Made in three shades: WHITE. IVORY and NATURAL

Obtainable from your regular Wholesaler or direct from the Sole British Agents:  
DEBACQ & HARROP, 68 Newman Street, Oxford Street, LONDON, W.1

*Dorin L.* 41 Charterhouse Sq., E.C.1

are advertising to the Public

"ROUGE BRUNETTE"  
(P.A.T.A.)  
"UN AIR DE PARIS"  
"CREME ECLALYS"

(Offering Free Samples).

Our discounts leave you a liberal profit.  
Prepare your stock to answer the demand.

Delivery from Stock.

Telephone : Central 1954

## PASTA

FOR BATH & TOILET USE.

A DELIGHTFUL  
NECESSITY.

Effectively and Extensively Advertised.

PASTA MACK is made in perfumed Tablets, Sparkling and Effervescent when placed in the water. Beautifies the complexion, softens the water, and yields a delicious perfume to the skin.

Sold by Chemists and Perfumers, in 2/- and 3/6 boxes. 3/6 size, 28/- per dozen boxes (each containing 8 large tablets). 2/- size, 16/- dozen boxes (each containing 8 small tablets). Wholesale:

WM. EDWARDS & SONS, 14-18 Nile St., City Road, London, N.1

Makers: H. MACK & SONS, Ltd. o/D.



## MACK

# LAMBPUF

MOUSLEY'S PATENT

Lambs-  
wool  
PuffWith  
Powder  
complete

IMPROVED MODELS.

REAL LEATHER.

L.P.14

1/6

each.

Size 2 1/8"

L.P.7

2/6

each.

Size 2 1/4"

L.P.3

6/6

each.

Size 3 1/2"

SUBJECT TO USUAL DISCOUNT.

## Beaverpuf Ltd.

Priest Bridge, Mortlake, London, S.W.14

Write for Price List

## PHILLI-MIRANO Ltd.

*Manufacturing Perfumers for  
the Home and Export Trades*

GROTON RD., LONDON, S.W.18

Every variety of Perfumery and  
Toilet Goods packed under Custo-  
mer's Private Brand if required.

### SPECIALITIES:

ALENTA HAIR CREAM

ALENTA PERMANENT WAVE LOTION

RHODORA LAIT-DE-LYS

RHODORA CREAMED FACE POWDER

RHODORA DOUBLE COMPACT  
POWDERS

RHODORA COMPACT POWDERS

,, BATH PREPARATIONS

TRADE



MARK

We are actual distillers  
of

## ESSENTIAL OILS

and shall be pleased to quote  
for your requirements.

BERGAMOT

GERANIUM

LAVENDER

NEROLI

PEPPERMINT

PETIT GRAIN

PORTUGAL

ROSE, OTTO

ROSEMARY

THYME

VERBENA

### ALSO

Bay, Cajuput,  
Cinnamon Bark, Citronella,  
Cloves, Eucalyptus, Juniper,  
Lemongrass, Lemon, Lime,  
Patchouli, Pennyroyal, Pine,  
Santal, Sassafras,  
Ylang Ylang, etc., etc.

## SPURWAY ET CIE, LTD.

89 Great Eastern Street,  
LONDON :: :: E.C.2.

CANNES-GRASSE, RIVIERA,  
PARIS.

LEIPSIC NEW YORK  
KINGSTON (ONTARIO)

Telegrams - "NEROLI, LONDON."  
Telephone - BISHOPSGATE 1372.









**This design** by Sir Bernard Partridge is available in three forms:—

- (a) Double-crown poster, 30" x 20", suitable for top of window, door or mirror.
- (b) Showcard, 14½" x 9½", suitable for counter and inside window.
- (c) Gummed sticker, suitable for attachment to accounts, letters, etc.

*All applications dealt with in strict rotation*

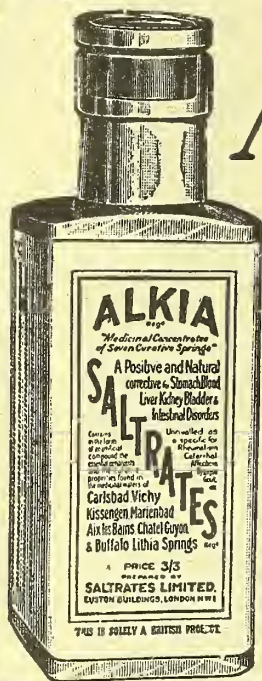
**VINOLIA CO. LTD., BLACKFRIARS, LONDON, E.C.4**



# Compounded UP TO A STANDARD

*(The Highest Possible)*

## Never DOWN TO A PRICE



these lines are as near perfection in their respective fields as it is humanly possible to get them, regardless of cost or selling price. Your customer requires no persuasion after he has once given our preparations a trial. He then KNOWS they are just what he wants and is interested in no others. In other words—after you make the first sale these goods go on selling themselves.

## Alkia Saltrates

The most efficient Saline on the market and the best value for the money. Pleasant tasting and always satisfies the user. Widely advertised for Rheumatism, Gout, Sciatica, or any Liver, Kidney, Stomach, Intestinal or Blood Disorders, Catarrhal Affections, etc.

**Sells at 3/3 (P.A.T.A.).**

## Reudel Bath Saltrates

The best selling and most fragrant, refreshing, beneficial and all-round satisfactory preparation for the bath—especially recommended for Corns and all Foot Troubles, Rheumatic Pains, etc.

**Sells at 2/- and 3/3 (P.A.T.A.).**

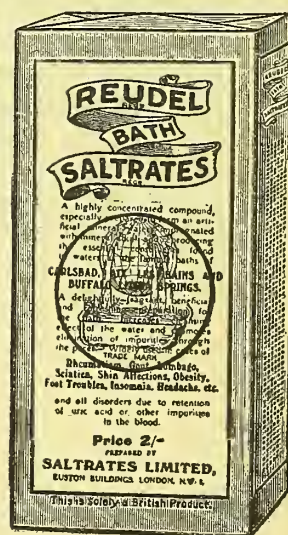
## YOU CAN STOCK THESE RAPIDLY MOVING LINES ON GUARANTEED SALE TERMS

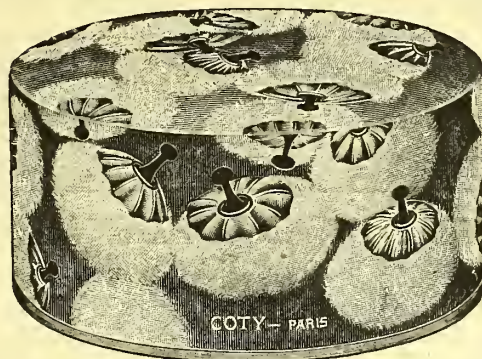
*Carriage Paid in Free Cases in United Kingdom on orders for three dozen, which may be assorted.*

*Showcards of strong selling power sent free on request.*

*Write for our Special Terms for Window Display.*

**SALTRATES LIMITED, Euston Buildings, London, N.W.1.**





## *When you show and recommend Coty Face Powders . .*

**Y**OU are linking yourself with a line that has very many points of real excellence. For Coty powders are packed in extraordinarily attractive air-tight boxes, and are sold in 9 true shades and 21 exquisite perfumes.

You are dealing in a powder which is entirely profitable from the second you display it, and which, selling once, sells again and again, leaving you a generous profit.

You are dealing in a product which entirely eliminates that bugbear of retail selling—experimenting. Any high-class dealer will tell you that Coty products move quickly as soon as they are displayed.

You are dealing with a House whose principle is to help *you* to sell, rather than merely to sell to you. We realise that we have not sold a single box of Coty Powder until *you* have sold it. Therefore we back you up to the utmost of our powers, with display material, and with the money value of our good name.

### A SUGGESTION

Few Dealers know the possibility of making more money by pushing our 4/- size, which contains double the quantity of the usual 2/6 size. We have found that every time this is properly pointed out to the public, the attraction of saving 1/- creates a sale.

Series o60, Retail Price 2/6

Series o61 (Double Size) 4/-

Trade Discount - - 40%

Less 2½% Monthly Settlement.

COTY (ENGLAND) LTD., Walmar House, 298 Regent Street, London, W.1



## A GOOD WINDOW ATTRACTION !!

**"SURCO" SHOW LEG** Fitted with an Elastic Stocking

A BUSINESS BRINGER.

YOU WILL BE SURPRISED AT THE RESULT.

APPLY **SURGICAL HOSIERY CO., LTD., (Dept. B) Russell St., NOTTINGHAM.**

THE "SOMERSET" DOUBLE WARP

**Crepe Bandages**

Oldest British Manufacturers. Lowest Prices. Highest Qualities  
 Sole Manfrs.—F. W. Folkes & Co., Wallbridge Avenue Mills, Frome, Som.  
 London Agents—T. J. SANDERSON & CO., 50/51 Fore Street, E.C.

**TINORI PAINLESS CORN CURE**

WHEN ONCE INTRODUCED SELLS ITSELF.

P.A.T.A. 2/- From All Wholesalers.

**EUGENE MAC SWEENEY, MFG. CHEMIST, CORK.**

**T.H. FORD LIMITED** **6, WELL ST. LONDON, E.C.1.**

Telegrams: Drofcotym, Cent, London. Telephone: City 2522 (Private Branch Exchange).

**SURGICAL DRESSINGS**  
**SURGICAL SUNDRIES**  
**"INGOT" Regd.**  
**QUALITY and FINISH.**

Are Selling Lines and bring Repeat Business.  
 Allow us to quote you when next in the market.

**THE RELIEF HOME MASSAGEUR****35/-**  
Each

An ingenious and efficacious instrument designed to serve in all ailments where massage treatment is recommended.

Adaptable for body, limb, and face massage.  
 Simple to work.

Independent of Electricity.

A Ready and Profitable Seller.  
 Please send for Trade Terms.

**RELIEF HOME MASSAGEUR,**  
 10 Park Grove Terrace, Glasgow.

**"CAPSICUM" CHEST PROTECTORS.**

**"ZORBO" Regd.**  
**PNEUMONIA JACKETS**  
 AND  
**"CAPSICUM" CHEST PROTECTORS.**

The best possible Manufactured. Invaluable in Pneumonia and other Chest Complaints.

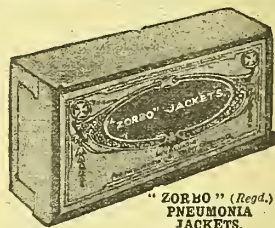
ORDER THROUGH USUAL WHOLESALER.

**ROBERT BAILEY & SON, LTD.** Marriott Street Mills, Stockport.High Class Surgical Dressings of **GUARANTEED BRITISH MANUFACTURE.**

Phone: Stockport 2794. Wires: "Undisputed."

London Office:

331 Sentinel House, Southampton Row, W.C.1.

**"ZORBO" (Regd.) PNEUMONIA JACKETS.**

MINIMUM P.A.T.A. PRICES

Size	each	doz.
1 8 x 6 Infants' 1/-	8/-	
2 10 x 8 Children's 1/6	11/9	
3 12 x 10 do. 1/11	14/6	
4 15 x 12 Adults' 2/6	18/-	
5 19 x 13 do. 3/3	22/6	
6 21 x 15 Ex. Large 4/3	27/6	

MINIMUM PRICES each. doz.		each. doz.	
Small "Single" 9d.	6/-	Small "Double" 1/6	11/6
Medium .. 1/-	8/-	Medium .. 1/10	15/-
Large .. 1/3	9/9	Large .. 2/3	18/-

**Surgical Rubber Goods****VENUS, OWL, GODIVA & BALLOON BRANDS.**

NOTICE.—Several instances of the sale of VENUS BRAND goods other than their make having been brought to the notice of Joseph Harris & Co., their Solicitors are instructed to take proceedings against anyone (Makers or Vendors) fraudulently using the name or design of VENUS or any imitation thereof in connection with Seamless Moulded Goods.

**SEAMLESS MOULDED SURGICAL GOODS, PESSARIES, HOT WATER BOTTLES, URINALS FOR NIGHT OR DAY USE. Wholesale & Export Only.**

**JOSEPH HARRIS & CO., Rubber Works, Broadheath, Altrincham.**

*Estd.*

TRADE

MARK



1850

# BERTONS

of Old Street

## Our Representatives

are now carrying new season's exclusive ranges in

CAMERA CASES

HOLDALLS

SPONGE BAGS

TENNIS RACQUET COVERS

&c.

Face  
Squares

Bath  
Gloves

Be sure you see them. Enquiries by post  
will receive the promptest attention.

Our goods and prices are right and  
**Ensure Satisfaction.**

## ARTHUR BERTON, LTD.

Surgical Dressings Manufacturers and Chemists' Sundriesmen,

**Britannia House, 238/248 OLD STREET, LONDON, E.C.2**

Telephones: Clerkenwell 1347/8/9.

Telegrams: "Aybelim, Finsquare, London."

**MANCHESTER: 36/38 Chapel St., Victoria Bridge. GLASGOW: 49 Jamaica St.**



# SIMPLIC (PATENT) SOOTHERS



THESE ALL-RUBBER SOOTHERS ARE MADE OF FINEST RUBBER BY A PATENT PROCESS. THEY ARE PACKED EACH IN A DUST-PROOF CARTON, AND THE ATTRACTIVE OUTER MAKES AN EFFECTIVE DISPLAY.

ASK YOUR WHOLESALE FOR  
LATEST TERMS.

Ask for Simplic British Branded Goods—Teats, Enemas, Whirling Sprays, Adults' Springless Trusses, &c. *Simplic Spells Satisfaction.*

THE CHEAPEST HOUSE  
FOR  
**RUBBER of QUALITY**  
95% BRITISH.

ENEMAS, BOXED, COMPLETE  
FROM 19/- DOZ.  
WHIRLING SPRAYS FROM 21/- DOZ.  
SYRINGES, ALL KINDS.  
BREAST RELIEVERS  
TEATS AND VALVES, SOOTHERS  
SPECIALITIES, ETC.

*Quality Guaranteed.*

JOHN QUILLIAM & CO. (1923), LTD.  
"Canterbury Works,"  
15a HAGLEY ROAD, BIRMINGHAM.

BUY YOUR  
BOTTLES, JARS,  
PILL TUBES  
PLAIN, CORKED & CAPPED  
AND  
**VACUUM FLASKS**  
AT LOWEST PRICES

FROM  
C. MELIN & CO. 7 INDIA STREET  
LONDON, E.C.3.

**"TAPON"** (Regd.)

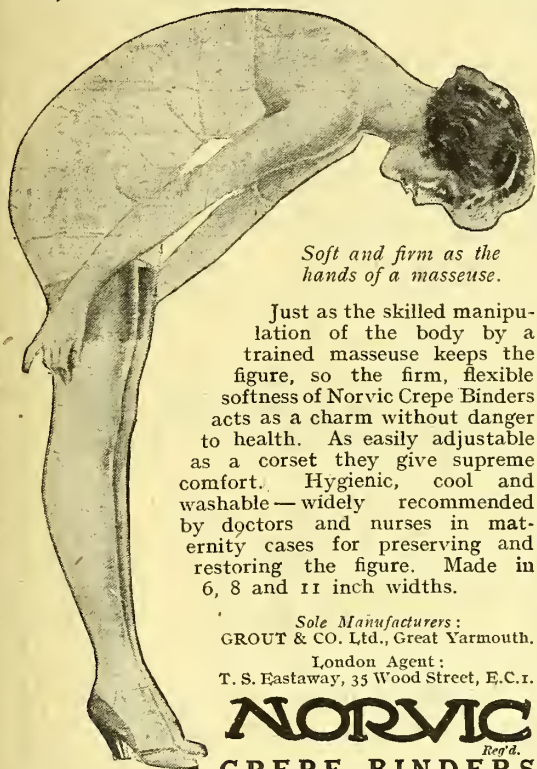
Tie up your Parcels with Advertising Tying Tape. Pleases both Eye and Pocket and gives Distinction to every Parcel sent out.

Various Colours and Widths. Printed or Plain.

Write for particulars, when Prices and Patterns will be forwarded.

**S. D. SIMOND & CO., LTD.**  
10 Monument Street - - E.C.3

Tel.: Avenue 6378. Telegrams: "Duncasim London."



*Soft and firm as the  
hands of a masseuse.*

Just as the skilled manipulation of the body by a trained masseuse keeps the figure, so the firm, flexible softness of Norvic Crepe Binders acts as a charm without danger to health. As easily adjustable as a corset they give supreme comfort. Hygienic, cool and washable — widely recommended by doctors and nurses in maternity cases for preserving and restoring the figure. Made in 6, 8 and 11 inch widths.

Sole Manufacturers:  
GROUT & CO. Ltd., Great Yarmouth.

London Agent:  
T. S. Eastaway, 35 Wood Street, E.C.1.

**NORVIC**  
Reg'd.  
CREPE BINDERS

# Zeal's CLINICAL THERMOMETERS

are  
**BRITISH MADE**  
by  
**BRITISH LABOUR**  
from  
**BRITISH GLASS**

and  
**GUARANTEED  
PERMANENTLY ACCURATE**

**G. H. ZEAL, LTD.** 75 & 77 St. John Street  
— LONDON, E.C.1 —



## THE "BULL" PERFECT SYRINGE PATENTED

The washer is of Spongy Rubber which always fits the bore and does not allow leakage or back-wash. Unaffected by climate. Easily sterilised. Impervious to acid solutions. **British-made.** Various patterns of point.

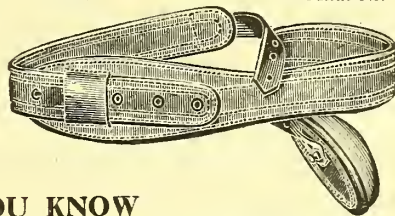
IN THE OPINION OF THE  
MEDICAL PROFESSION THE  
MOST EFFICIENT SYRINGE  
:: ON THE MARKET ::

FROM ALL  
WHOLESALE HOUSES

## The "Hernicura" "COMFORTABLE"

Reg. No. 627925.

Patent No. 23241.



### YOU KNOW

how often you have trouble in fitting customers with trusses, and how frequently dissatisfaction is expressed.

### TRY

the "Hernicura" Trusses. They are easy to fit, possess great adaptability, give absolute satisfaction, and yet are most reasonable in price.

A 33 inch Truss will adjust from 30 to 36 inches.  
Head is also adjustable.

Write for Price List.

Specimens on appro.

**MORGAN-DAVIS & SONS LTD.**

Truss and Surgical Appliance Makers

276-278 BISHOPSGATE, E.C.2.

Phone:  
Bishopsgate 2417.



**BUY ONE BOTTLE**

to serve both for dispensing  
and packing your specialities.

**Q** **CHEAP** enough to use for N.H.I.  
dispensing.

**Q** **GOOD** enough to do justice to  
your packed lines.

**White Flint Dispensing Flats**

(YORKSHIRE MADE)

(Mouth-Blown ; Not Machine-Made.)

6 and 8 oz. - 16/- per gross.

*Other sizes in proportion.*

5 gross crates, assorted sizes, sent  
carriage paid within 100 miles of Leeds.

Crates 2/6 each ; returnable.

**QUICK DELIVERY.**

SEND YOUR ORDER NOW

**THOMAS SWALES LEEDS** 20/24 Butts Court

"SWALES for SUNDRIES."

"SWALES for SUNDRIES."



(Regd.)

**YOUR CAPPING PROBLEM !**

**THE SOLUTION—**

**'ACELTA'**

**'ACELTA' CAPPING CO., Ltd.** 185 Princess St.,  
MANCHESTER

**VISKAP**

**BOTTLE  
(APS)**

*The*  
**ORIGINAL-BEST  
and  
ONLY BRITISH MADE.**

**SELF-FIXING, HERMETIC,  
TRANSPARENT,  
OPAQUE, COLOURED.**

FROM THE MANUFACTURERS :

**VISCOSE DEV. CO. LTD. BROMLEY  
KENT.**

**A.S. PRICE & CO. LTD.**

*Manufacturing Chemists*  
**Blackheath. Birmingham**

**SPECIAL OFFER**

**CORKS**

**3/4 OZ.**

**PER 4 1/2<sup>1D.</sup> GR.**

**CARRIAGE PAID ON 25 GR. LOTS**

**SEND FOR SAMPLE.**

**BOTTLES and JARS**

for  
**Chemists, Druggists,**

**Perfumers, etc.**

Well assorted  
stocks  
always held.



Lettered and  
Proprietary  
Bottles.

**OVERTON PANEL.**

Write or 'phone (Central 2430, 5 lines) for prices to

**L. LEPERSONNE & Co.**

**99 CANNON STREET - LONDON, E.C.4**  
(Strictly Wholesale only.)

**NURSE HARVEY'S MIXTURE**

A safe, simple and reliable remedy for Children's  
Ailments is advertised so extensively in the daily  
and weekly Press as to bring mothers to the  
retailer without effort on his part.

The selling has been done before the mother  
reaches the chemist, and, having supplied her, it  
is only common sense to claim she will buy other  
family necessaries from him. Moreover, the con-  
tinuous demand for it produces a quick turnover.

*For Direct Terms apply to—*

**OSCAR SCRUTON & CO., YORK**

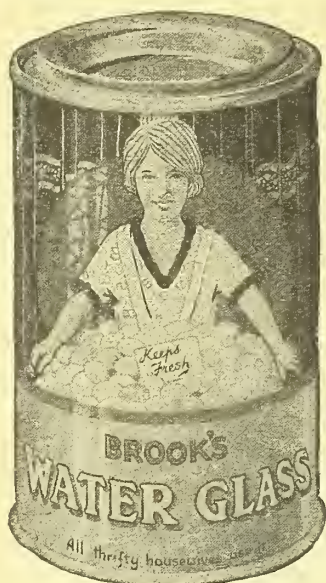


**GLASS - MAKING**  
an old craft aided by modern science.

**CONTAINERS**  
in art colours for  
**PERFUMES,**  
**COSMETICS,**  
**& BATH**  
**CRYSTALS.**

designed and made by  
**WOOD BROS. GLASS COMPANY Ltd**  
Barnsley, England.  
*Established 1828.*





# WATERGLASS

PACKED IN HANDSOME LITHO'D  
ALL-TIN CONTAINERS.

SHOWCARDS AND WINDOW-BILLS  
WITH ALL ORDERS.

*Special Window-Show Matter  
with Reasonable Orders.*

ABSOLUTELY LOWEST PRICES.

*Write us for particulars.*

**BROOK, PARKER & CO. LTD., BRADFORD**

# CORNER'S OILS

have **80** years' reputation as a remedy  
for Accidents and Animal Ailments.

Protected Retail Price - - **2/9** a bottle.

Wholesale - - - - **24/-** per doz.

P.A.T.A. Nett 1 month.

Carriage Paid on 3 dozen Lots.

**LIBERAL TERMS TO AGENTS.**

**EVANS, GADD & CO., LTD.**

REDCLIFF STREET, BRISTOL, and FORE STREET, EXETER.

RING UP  
CENTRAL 9677.

**Transharit**  
*Patented & Registered*

THE PERFECT  
**Transparent**  
WRAPPING MATERIAL

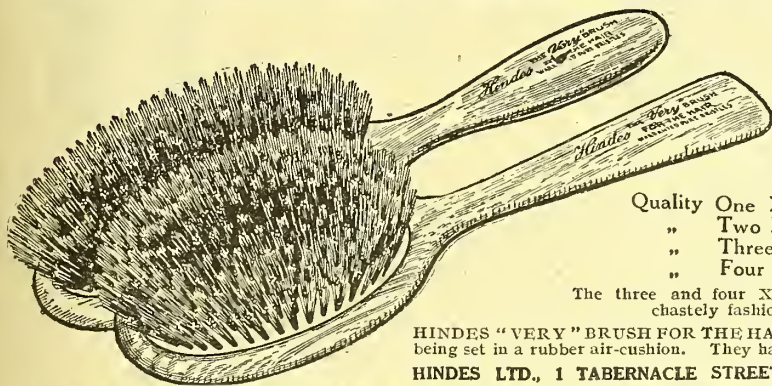
**QUITE INSOLUBLE**

Odourless, Tasteless, Non-injurious,  
Air-, Grease-, Water-, & Odour-Proof.

ESSENTIAL FOR HIGH-CLASS WRAPPING OF PERFUMES, SOAPS, AND ALL ALLIED PRODUCTS.

Samples and Prices on Application.

**Sier, Voss & Tomes, 11 b Upper Thames Street, London, E.C.4.**



**HINDES  
"VERY"  
HAIR BRUSH**

Quality	One X	Sold at 7/6d. each.	TRADE PRICE 33 1/3%
"	Two XX	" 10/6d. "	
"	Three XXX	" 15/- "	
"	Four XXXX	" 18/6d. "	

The three and four XXXX grade is made in Ebony or Rosewood chastely fashioned in both oval and circular bodies.

HINDES "VERY" BRUSH FOR THE HAIR is guaranteed pure bristles, the multiple tufts being set in a rubber air-cushion. They have been known to the trade for nearly 40 years.

HINDES LTD., 1 TABERNACLE STREET, LONDON, E.C. :: Works: BIRMINGHAM

**SHOWCASES**

UPRIGHT CENTRE CASES, WALL CASES,  
**GLASS COUNTERS, MIRRORS**  
WINDOW FITTINGS, GLASS SHELVES,  
**SHOW STANDS, DRAWERS, DESKS**  
CHECK TILLS, &c. Immense Stock.  
NEW and SECOND-HAND.

Ready for Immediate Delivery. For Sale or Hire.

**FREDERICK MAUND**  
175/9 Old St., LONDON, E.C.1.



*Business is  
brisker since  
I got my  
Gledhill Till*

**A Gledhill Till  
Creates Goodwill**

It deals quickly and efficiently with every transaction; customers are impressed with your prompt service; all possibility of mistake or dispute is avoided, and every penny received is carefully accounted for. Make a Gledhill Till the foundation of your business.

Send for Catalogue and instalment terms.



**ADEPS LANÆ, P.B.**

THE FINEST BRITISH LANOLINE PRODUCED

IS MANUFACTURED BY

**THE PHARMACEUTICAL LANOLINE CO.**

Carnwath Road, Fulham, London, S.W.6.

Telephone: Putney 42.

WHO INVITE ENQUIRIES. Telegrams: "Batapo, Walgreen, London."



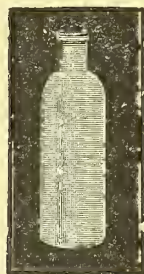
# LANG'S WIDE RANGE OF GLASSWARE

## SPECIAL OFFER THIS WEEK

COUGH ESSENCE  
BOTTLES,  
to hold about 2½ ozs.

PROVENCE OIL  
BOTTLES,  
to hold about ¼, ½,  
1 pint and 1 quart.

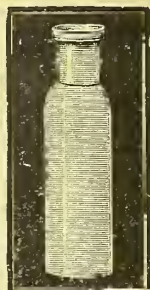
CHELLENHAMS,  
to hold about 12 ozs.



Do not miss  
these bargain  
lines in glass-  
ware. We  
have in stock,  
and can deliver  
immediately,  
large quanti-  
ties of Panelled



Bottles, all  
sizes, Limes,  
Kalis, Vials,  
Medicals, etc.  
Don't wait for  
'forward' de-  
livery. We  
can deliver  
here and  
NOW.



Write for prices and particulars without fail.

## JULES LANG & SON

Telegrams:  
"Assorted," Phone  
London."

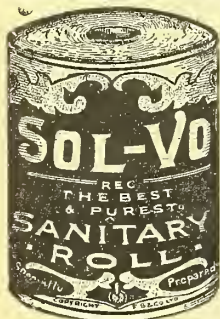
'Phone:  
Clerkenwell 8770.

*The Glass Specialists*  
CHARLTON PLACE,  
ISLINGTON, LONDON, N.1.

Codes:  
A B C, 5th Edn.,  
Scott's 10th Edn.,  
1906 and Bentley's  
Complete Phrase  
Code.

(Opposite Agricultural Hall).

## SOL-VO SANITARY ROLLS & PACKETS.

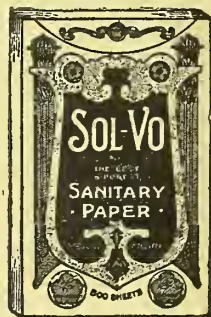


# SOL-VO

REGD

THE BEST & PUREST

## SANITARY PAPER



	per doz.
Three dozen Rolls ...	7/- net.
Half gross " ...	6/6 "
One gross " ...	6/- "
Five gross " ...	5/3 "

	per doz.
Three dozen Packets ...	10/- net.
Half gross " ...	9/6 "
One gross " ...	9/- "
Five gross " ...	8/3 "

CARRIAGE PAID. CASES FREE.

## FORD, SHAPLAND & CO. Ltd.

LABELS & SHOWCARDS — PRINTERS — CARTONS & ENVELOPES,  
GT. TURNSTILE, HIGH HOLBORN, LONDON, W.C.1.

TELEGRAMS: FORSHAPCO. WESTCENT, LONDON.

TELEPHONES: HOLBORN  
5503 & 4731



We invite your enquiries for

# WATER GLASS

FULL STRENGTH  
ATTRACTIVE LABEL  
LEVER LID TINS

NEWBALL & MASON, Ltd.  
NOTTINGHAM.

*This gives a thorough mix-up*

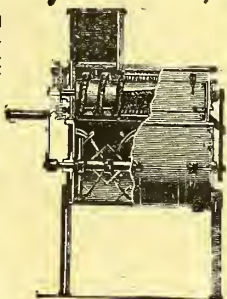
A Gardner "Rapid" sifter and mixer will thoroughly sift and mix  $\frac{1}{2}$  oz. of one ingredient with a 30-lb. mixture of dry powders at one operation, and "every pinch of the whole will show its presence"—a customer's statement.

Write us for list of Ball Mills, Disintegrators, Millstones and Mills, Drum Sieves, Drying Machinery, etc.

**WM. GARDNER & SONS**  
(Gloucester) LTD.

Bristol Road, GLOUCESTER.

'Phone 117. "Grams": "Gardner," Gloucester



# ZEISS

REFLECTOR LAMPS  
THE BEST LIGHTING AT  
THE LOWEST COST.

PRICES from - 9/-

Complete as Illustration.

Full particulars of all models, for shop, office, window, warehouse and outdoor lighting, in Illustrated Catalogue, B79, from

The British Representatives:

**J. W. ATHA & CO.** WINSLEY HOUSE, WELLS ST., OXFORD STREET, LONDON, W.1

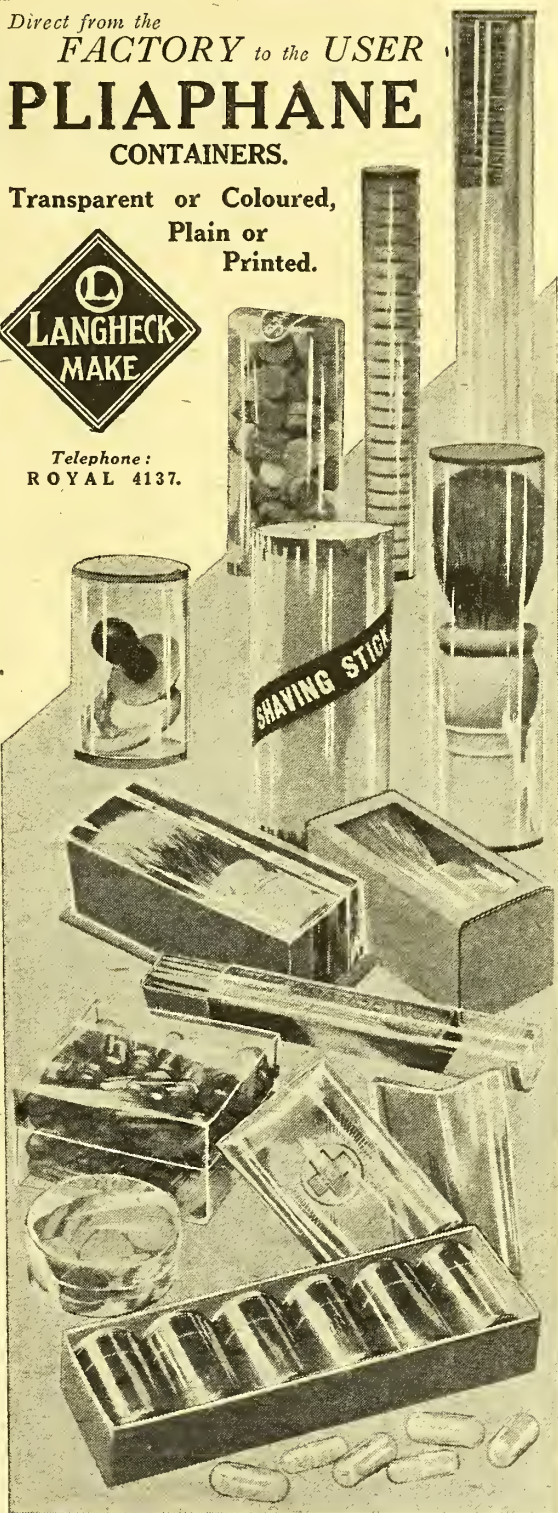


Direct from the  
**FACTORY to the USER**  
**PLIAPHANE**  
CONTAINERS.

Transparent or Coloured,  
Plain or  
Printed.



Telephone:  
ROYAL 4137.



**LANGHECK & Co. LTD.**  
William B. Sigerist. G. L. Langheck.

4, NEW LONDON STREET,  
LONDON, E.C.3.



# WATERGLASS

We were the first to pack this line for the Chemist trade, and by only supplying best quality and value, safe and attractive tins, have maintained our position as the **LARGEST PACKERS OF WATERGLASS.**

**TOMLINSON & HAYWARD, LIMITED, LINCOLN**

## "MAMMALINE" What it DOES, and WHY you SHOULD STOCK IT.

(Registered.) Because it is the only **GUARANTEED CURE** for **GARGET** in **SHEEP** on the **MARKET**. Guarantee given with every Bottle! Any Customer who says otherwise and sends us an empty **MAMMALINE** Bottle back, with Name and Address of the Chemist purchased from, will have his Money **Cheerfully Returned** without any Comment. "**MAMMALINE**" is being extensively Advertised, and we are sending out **100,000** Circulars to Farmers and Stock-Owners. Many of these are your Customers.

**BE ready "MAMMALINE"?—YES.**

ONE Size, retailed at Face Value, viz., **4/9 per Bottle.**  
CASH WITH ORDER TERMS.

1 dozen .. **42/-**      6 dozen .. **41/- per doz.**  
3      .. **41/6 per doz.**      12      .. **40/6**

All Packages Free and Carriage paid. Window **DISPLAY**  
Card sent with each Order from the Sole Makers,

**SUFFOLK ANIMAL MEDICINE CO. Ltd.**  
**BURY ST. EDMUNDS.** 'Phone: No. 277.

## FORMALIN

is now contained in that well-known liquid seed dressing, **CORVUSINE D.G.** in correct strength as recommended by the Ministry of Agriculture as a protection against **BUNT**. No extra charge is made. Corvusine users therefore save their Formalin expenditure.

Write for terms of this valuable agency to the Sole Manufacturers:

**HAWKER & BOTWOOD, LTD. - GRAYS, ESSEX.**

## IMPORTANT!!!

**FARMER'S "BAITED" PHOSPHOR PASTE** and "**RATMOUSINE**" are not affected by the Labelling of Poisons Order.

**KEEP SELLING.**

Proprietors: **F. FARMER & CO., 1a, College Lane, Homerton, E.9**

Why

## CATALINE

Pays  
to Stock

**BECAUSE** it enjoys the largest sale of any Cattle Medicine Preparation and is on the **P.A.T.A.**

**BECAUSE** it is consistently advertised and all advertisements refer to the Chemist as the source of supply.

**BECAUSE** it is well packed, does what it is advertised to do, and shows the trade a satisfactory profit.

**BECAUSE** we do not employ travellers calling on Farmers, attending sales, &c.

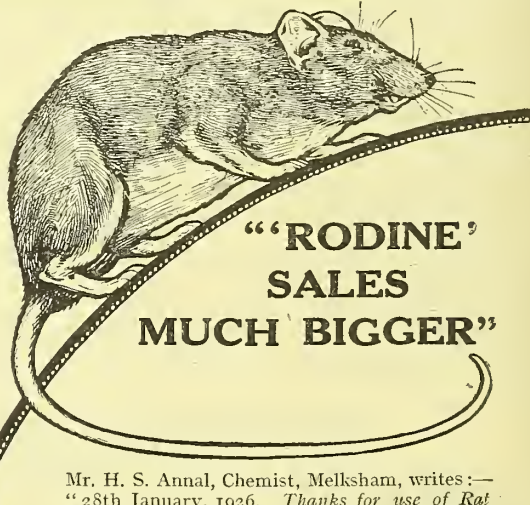
One size, retailed at face value, viz: **3/9 per bott.**

Cash with order terms.

1 doz., **36/-** 3 doz. at **35/6** 6 doz. at **35/-** 12 doz. at **34/6 per doz.**  
CARR. PAID. CASHES FREE.

Stocked by most Wholesale Houses.

**THE CATALINE CO. BRISTOL & DUBLIN.**



Mr. H. S. Annal, Chemist, Melksham, writes:—  
"28th January, 1926. Thanks for use of Rat Models. They are certainly effective sales makers, and in spite of keen competition our 'Rodine' sales are much bigger than ever before."

What about a "Rodine" Window Show now?  
"Rodine" is a profitable side-line that yields a **HANDSOME PROFIT.**

Attractive Showcards and effective Display Matter, including two Rat Models, can be had on request.

**PUSH "RODINE"—IT PAYS.**

Get it direct from the sole maker—

**T. HARLEY, Manufacturing Chemist, PERTH.**

# The CHEMISTS' EXHIBITION

(the 30th of the series)

WILL BE HELD IN THE

**HOLLAND PARK HALL**

*Holland Park Avenue, LONDON, W.*

**MAY 10th to 14th - - - 1926**

From 11 a.m. till 8 p.m. daily.

**OPEN TO THE TRADE ONLY**

THE HOLLAND PARK HALL has proved an excellent location for the Chemists' Exhibition, and, as in previous years, the forthcoming one will be attended by chemists and other large retail distributors from all parts of the British Isles, by the principal indent and other merchants, and by important buyers from overseas.

---

For particulars of space still available, Admission Tickets, &c., apply to  
the Organisers—

**THE BRITISH & COLONIAL DRUGGIST, LTD.**  
**194/200 BISHOPSGATE, LONDON, E.C.2**

Phone: Bishopsgate 2148.

Telegrams: Pharmacist, Ave, London.



# For SUN, DUST, WIND & GLARE



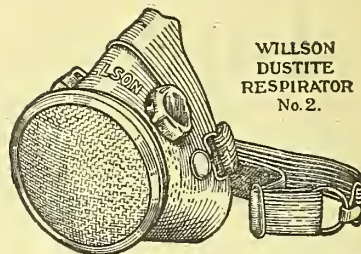
ONE OF THE MANY NEW  
ATTRACTIVE ASSORTMENTS OF

## Willson Goggles

Containing 12 Pairs of High Grade  
Goggles with assorted Fieuzal,  
Amber and Smoke Glass.

Look for  
the **WILLSON** name  
on the frame

CATALOGUES  
SENT ON REQUEST.  
ALSO ANY INFORMATION  
GLADLY GIVEN.



WILLSON  
DUSTITE  
RESPIRATOR  
No. 2.

For Dusty Work and Spraying.

WILLSON DUSTITE  
RESPIRATOR No. 2.  
Dry Filter Model with 2 Relief  
Valves.

WILLSON DUSTITE  
RESPIRATOR No. 3.  
Wet Sponge Filter Model,  
with 2 Relief Valves.

Protection with Comfortable  
Breathing.



DISTRIBUTORS TO THE WHOLESALE TRADE:

S. PULZER & SON, Ltd., 45 Hatton Garden, London, E.C.1

Telegrams: "PULZONE, LONDON."

Telephone: HOLBORN 5288.

# The World's Best Hairbrush

means quicker sales and  
bigger profits for you

Why? Because it has more selling points than any other brush in the world. Because it meets to a greater degree than all others the modern woman's need for deep, penetrating hairbrushing plus absolute cleanliness.

Consider for a moment the strength and toughness of the bristles and the resiliency of the rubber pad in which they are set. Is there any other brush more capable of getting right down to the roots of the hair than the "Klenly" Brush? Consider also the tempting beauty of the various colours and designs.

And this is not all. Both the bristles and the pneumatic pad are white. Because of this the brush is always kept clean; its whiteness instantly betrays any dirt or dust that may come from the hair. The air vent, too, is placed in such a position that it's the easiest thing in the world to clean the brush.

These then are the reasons why you should stock the "Klenly" Hairbrush—why you should take your share of the extra-generous margin of profit that we as the actual manufacturers can afford to allow you.



Prov.  
Pat.  
28928/24

RIGBY'S  
**Klenly**  
HAIR BRUSH

RIGBY, BATTOCK, LTD., 28 MUSEUM STREET, LONDON, W.C.2.

Protected in U.S.A., CANADA and FRANCE.

Write at once for special folder giving full details and prices of the various designs and see for yourself what attractive opportunities the "Klenly" Brush affords for profitable business.



## SHERLEY'S DOG MEDICINES. INSECT POWDER, SHAMPOO AND LACTOL.

(P.A.T.A.)

These preparations command a ready sale, and are by far the largest advertised of any on the market. They are protected at prices that leave a good margin of profit for the retailer, and the terms on which they are supplied preclude any possibility of loss. We have an excellent range of literature and show cards, and do all in our power to assist chemists by referring mail customers to them.

WRITE FOR PRICE LIST  
AND TERMS.

A. F. SHERLEY & CO., LTD.

18 MARSHALSEA ROAD, LONDON, S.E.1

1st. No.: Hop 1897.

Telegrams: "Sherleydm, London."



### BOOKS FOR PHARMACISTS.

Send us a post card and we will send you a 32-page catalogue of professional and business books for Chemists and Druggists. These are American books and will give pharmacists in other lands the secrets of the wonderful success of druggists in the U.S.

The SPATULA, BOSTON 14, MASS., U.S.A.



## Postcard Enlargements Per Return of Post

2/- for 12. 1/3 for 6. 3d. for single.

Off one negative.

Send for our Enlarging List, the cheapest in the Trade.

A. J. SHAWYER & CO.

12 WOOD STREET - - SWINDON, WILTS.

Sent on 14 days' trial  
upon receipt of Cash or two  
Wholesale references.

DUDLEY'S "EFFICIENCY"  
CASH TILL.

Size 8 x 9 x 7 1/2 in.

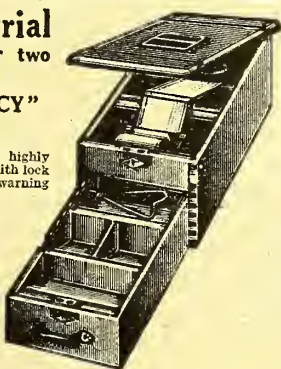
Solid Mahogany, dovetailed corners, highly polished finished lid, and drawer fitted with lock and key. Check action and automatic warning bell to drawer. Three cash compartments and one for notes.

Price 69/6 Each.

List No. C.D. 801 of other  
Tills free on request.

DUDLEY & COMPANY, LTD.,

558-576 Holloway Road, London, N.7.  
City Showrooms: 65 Fero Street, E.C.2



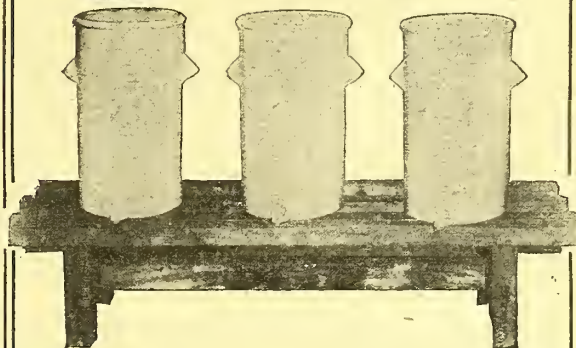
## A COMPLETE DEVELOPING SYSTEM

for

£9 : 9 : 0



*Ideal Equipment  
for Small  
D. & P.  
Departments*



### No.2 Developing System

Develops 36 3 1/4 x 2 1/4 films per hour  
(or equivalent of other sizes). Takes  
films of all sizes. One assistant only  
required. Occupies space 3' x 1'.

Complete with 3 Royal Doulton Tanks  
and 3 Racks - - £9 : 9 : 0

*Write for Installation Booklet.*

HOUGHTON-BUTCHER (Great Britain) Ltd.

ENSIGN HOUSE, 88-89 High Holborn  
LONDON, W.C.1.



# PURE ORANGE WINE

## A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopoeia.

(Wholesale only).

Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.

### FREDK. FINK & CO.

10 &amp; 11 MINCING LANE, LONDON, E.C.3.

**SPECIALITIES.**—Gums Arabic and Tragacanth as imported or finely powdered

### INDIAN PERFUMES (Wembley Surplus).

Jasmin, Sandalwood, Amber, Lotus, Nissim and Vidal.

**FOOTED TUBES and ORIENTAL VASES,**  
also STAGS and ELEPHANTS.

Samples on request.

**E. N. BROMAGE & CO.,** *Perfumery Department,*  
73 Selhurst Road, LONDON, S.E.25.



### SHADEINE

For COLOURING GREY HAIR

This popular article is largely advertised

and stocked by all Wholesale Houses.

Trial size 8d. per doz. .. 6/-

1/4 size, per doz. .. 12/-

2/6 size, per doz. .. 24/-

3/9 size, per doz. .. 38/-

The SHADEINE CO., 58 Westbourne Grove, London, W.2.

### TALCUM POWDER FACE POWDER VANISHING CREAM

Any Grade.  
Any Colour.  
Any Perfume.  
Any Quantity.

All Merchandise in Bulk or in your own Containers.

The O-PINE-O Manfg. Co. Ltd., Montague Rd., Hornsey, London, N.8



Those First Grey Hairs  
appear just  
here

Touch them up with  
**TATCHO-TONE**



Medical Guaranty with bottle. Chemists Prices 2/6 & 4/6  
or direct to the Tatcho-Tone Co., 5, Gt. Queen St., W.C.2

### PUFFS of ALL KINDS in DOWN and WOOL.

### SOLID FACE POWDERS

COMPLETE WITH PUFFS.

Inquiries invited by makers,

**F. SCHUTZE & CO., Ltd.****BLACK BULL WORKS,**

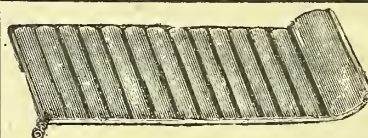
Caledonian Market, London, N.7.

### DEVILBISS SPRAYS

MEDICAL  
— and —  
PERFUME

27 Old Bond Street, London, W.

GERRARD 6867.



Makers:

**Geo. MacLellan**

&amp; Co., Ltd.,

Makers of everything  
Waterproof and Rubber  
Established 1870.

Glasgow Rubber Works, Maryhill, Glasgow.



### FOR CREPE 'VINWOOD' BANDAGES

Trusses, Belts, Elastic Hosiery, &amp;c.

Ask for "EUREKA" Brand

Obtainable from Wholesale Houses or

**VINCENT WOOD,** 91/93 NEWINGTON CAUSEWAY, S.E.1.

### T. SHERBORNE & CO., LTD.

Surgical Appliance Manufacturers,

ABDOMINAL BELTS, SPRING TRUSSES, ELASTIC  
BAND TRUSSES, SUSPENSORY BANDAGES, &c.

Phone: Syd. 517.] Wholesale &amp; Export only. [Est. 1903.

HONOR OAK PARK, LONDON, S.E.23

### MELROSE TABLETS

**FOR CHAPPED HANDS**  
A VERY PROFITABLE SELLING LINE.

Chemists' net prices carriage paid.

2d. tablets 1/4 dozen, 15/- gross. 5 gross

13/6 gross.

3d. tablets 2/- dozen. 6d. tablets 4/- dozen.

**ROBERTS & SHEPPEY**

2 Skipton Street, - LONDON, S.E.1.

### TOWLE'S Acts like a CHARM.

For COUGHS,  
DIARRHŒA, **Chlorodyne**  
DYSENTERY.

(Labelled for 1926.) Does not require Purchaser's Signature.

### CHEMISTS' SHOP FITTINGS

First-class Material and Workmanship.

Also *SECOND-HAND FITTINGS*—varied range.**RUDDUCK & CO.** 262 OLD ST., LONDON, E.C.

### EXCLUSIVELY A PHARMACY LINE

### P.P.T. PY-SHAN POINTS TEA

SECURES YOU REGULAR CUSTOMERS  
AND 7d. PER POUND PROFIT.

Write for full particulars to — **Thos. Christy & Co.,** 4/12 Old Swan Lane, E.C.4

# BRITISH INDUSTRIES FAIR—1926

White City, Shepherd's Bush, London, W.12 - - February 15—26

Dear Sirs,

We wish to advise you that once again we are exhibiting at the above Fair.

Our Stands are:  
Nos. A 57 and 58.

Telephone: Park 7769.

SHEPHERD'S BUSH ENTRANCE

(Alight at Shepherd's Bush Tube Station).

We shall be showing a full sample range of our Standard Lines in

TOILET AND SHAVING SOAPS

TOILET PREPARATIONS

PERFUMERY, etc.

and in addition we shall have a complete range of our

LATEST NOVELTIES IN

SOAP AND PERFUMERY.

We feel we are fully justified in stating we are recognised as the premier house for Novelty Goods, and also the leading non-combine firm of Soap Manufacturers.

The year just closed shows a new high record in the sales of Cussons' products, and we choose to interpret this as due to the confidence of our customers in the quality of our goods.

We are continually striving to serve you well and secure your confidence, and are desirous of being YOUR dependable source of supply for our class of goods.

We are confident a visit to our Stand will prove mutually beneficial, and now we have completed our new factory we can assure you of prompt and effective service in the future.

May we look forward to a visit from you?

CUSSONS, SONS & CO., Ltd.,

Fine Soap Makers and Perfumers,

Kersal Vale Works,

MANCHESTER.

LONDON SHOWROOMS:

Norwich House,

Southampton Street,

High Holborn, W.C.1.



THE MAN BEHIND THE COUNTER GETS THE  
QUANTITY DISCOUNTS ON

## PARMINT

For COUGHS, COLDS  
and CATARRH.

## KARMOID TABLETS

For  
CONSTIPATION, STOMACH TROUBLES, Etc.  
AND

## CARMAROLE COMPOUND

For KIDNEY TROUBLES, RHEUMATISM, Etc.

*Big Advertising Campaigns Now In Force.*

5% Quantity Discount on all 6 doz. orders.  
Supplied through Wholesaler or direct.

Our Advertising is creating big demands—order your 6 dozen TO-DAY and get the additional 5% profit.

*Sole Manufacturers :*

## INTERNATIONAL LABORATORIES

10 Phoenix Place, Mount Pleasant, London, W.C.1



## FAIRY DYES

Mean Greater Turnover for You—and Absolute Satisfaction for Your Customers.

THERE is no more attractive line on the market to-day—there is no better seller—and no article has made larger strides in popular favour.

## FAIRY DYES

are now sold in glass tubes, encased in smart, clean-looking “safety-first” cartons. They are retailed at 2d. each, made in 25 popular shades and colours, and are extensively advertised in the right publications.

You can rely upon Fairy Dyes—for prompt delivery in any quantities—for fresh stocks—for quick, easy-to-handle, clean turnover, and as tried favourites your customers are always satisfied. See that you are supplied without delay.

*For Trade Terms and particulars write to*

## FAIRY DYES, LTD.,

61 WELL ROAD  
GLASGOW.

London Depot - - - - - 292 UPPER STREET, ISLINGTON, N.1.

# POTTER & CLARKE

60/64, ARTILLERY LANE, L<sup>TD</sup>  
LONDON, E.C.1.

Telephones : Bishopsgate 1033-4-5.

Telegrams : "Horsehound, Phone, London."

MANCHESTER : 24 LUNA STREET, GT. ANCOATS.



## POTTER'S ASTHMA CURE

AND

## POTTER'S CATARRH PASTILLES

ARE WIDELY ADVERTISED TO THE PUBLIC.

*We are spending thousands of pounds to help you sell a line which yields you a handsome profit.*

Potter's Asthma Cure  
Potter's Asthma Cigarettes

P.A.T.A. 1/6. Dozen 14/-

Potter's Asthma Smoking  
Mixture

P.A.T.A. 9d. Dozen 7/-

Potter's Catarrh Pastilles

P.A.T.A. 1/3. Dozen 11/-

Packed in beautiful Show Outers. Showcards for Counter and Window Display with all orders.





# ANOTHER MUSTEROLE MONTH

Musterole's friendly, health-giving warmth is soothing away coughs, colds and other winter ailments in many a house.

Big repeat business for you here.

And all the time Musterole's thrice-weekly advertisements are steadily persuading more and more mothers to rely upon this sure, painless remedy.

Sooner or later they'll want their pot of this clean white ointment.

Is a beautiful Musterole showcard beckoning these old and new customers into your pharmacy as they walk up the street?

It costs nothing to put the showcard in your window, but its value in Musterole sales is almost incalculable.

A postcard brings it to you, free.



**THOS. CHRISTY  
& CO.**

4-12 Old Swan Lane,  
London, E.C.4.



## *Dependable products that build Goodwill*

These preparations, convenient to use and thoroughly dependable, merit attention. The demand for them already exists. Display them on your counter and make the sales.

TRADE  
MARK

### **'WELLCOME' BRAND TOILET LANOLINE**

Possesses exceptional and outstanding features. Entirely free from woolly odour, delightfully perfumed and of pleasing consistency. The ideal emollient for all seasons.

TRADE  
MARK

### **'BOROFAX' BRAND BORIC ACID OINTMENT**

Extremely useful in home and workshop. A first-aid antiseptic dressing which never becomes rancid. The collapsible tube ensures freedom from contamination.

*'WELLCOME' TOILET  
LANOLINE and  
'BOROFAX' each  
supplied in collapsible  
tubes of two sizes  
at 7/6 and 15/- per  
doz. (subject)*

**'Wellcome' Toilet Lanoline and  
'Borofax' are packed in display  
outers designed to help your sales.**



**BURROUGHS WELLCOME & CO., LONDON**

Address for communications: SNOW HILL BUILDINGS, E.C. 1

Exhibition Room: 54, Wigmore Street, W. 1

Associated Houses: **NEW YORK MONTREAL  
SYDNEY CAPE TOWN MILAN BOMBAY  
SHANGHAI BUENOS AIRES**



# Here's Profit for you!

## Sell UCAL BRONCHIAL LOZENGES

and reap the benefit of years of successful trading with this ever popular line.

6 doz. 9d. size—

With Bonus, costs you .. £1 : 16 : 0  
Selling at £2 : 18 : 6

Profit on Cost .. .. £1 : 2 : 6 or 62.5%

Profit on Turnover .. .. 38.4%

1 gross 9d. size—

With Bonus, costs you .. £3 : 12 : 0  
Selling at £6 : 1 : 6

Profit on Cost .. .. £2 : 9 : 6 or 68.7%

Profit on Turnover .. .. 40.7%

TERMS:

9d. size .. 6/- doz.

1/6 size .. 12/- doz.



3 gross 9d. size—

With Bonus, costs you £10 : 16 : 0

Selling at £18 : 9 : 0

Profit on Cost .. £7 : 13 : 0

or 70.8%

Profit on Turnover .. 41.4%

Bonus with all orders for 6 doz. and over as follows:—

Over 6 doz. 9d. size or equivalent  $\frac{1}{2}$  doz.

Over 1 gross 9d. size or equivalent  $1\frac{1}{2}$  doz.

Over 2 gross 9d. size or equivalent 3 doz.

Over 3 gross 9d. size or equivalent 5 doz.

The United Chemists' Association, Limited, CHELTENHAM SPA.

# Disinfectants

OF GUARANTEED STRENGTH

High Co-efficient Fluids 18 to 20

miscible in fresh, salt or brackish water.

Also Fluids possessing 10% to 80% Tar Acids

Powder Disinfectants with definite percentage of Tar Acids or Co-efficient

Pine Fluid and Powder Disinfectants

British-made Lysol, 50% Cresols guaranteed

Naphthalene Balls, Flake, Candles & Tablets

May be sold under Chemist & Druggist's Own Name & Brand.

WE INVITE APPLICATIONS FOR SAMPLES & PRICES

**BURT, BOULTON & HAYWOOD, LTD.**

**SALISBURY HOUSE, LONDON WALL, E.C.2**

Phone: London Wall 7569

Actual Distillers of  
Coal Tar & Ammonia  
Products.

Distributors of Petrol.



## A WEEKLY JOURNAL OF PHARMACY AND OF THE CHEMICAL AND DRUG TRADES

THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

### SUBSCRIPTION RATE

TWENTY SHILLINGS a year payable in advance to any part of the world, including a copy of *The Chemist and Druggist Diary*. Subscriptions may begin with the first issue of any month. Single Copy, 9d., post free; *Diary*, 10s., post free. Postal orders and cheques should be crossed "Bank of Liverpool and Martins, Ltd."

TERMS FOR ADVERTISING may be obtained on application to **Head Office: 42 CANNON STREET, LONDON, E.C.4** (Telegrams: "Chemicus, Cannon, London." Telephone: Central 3617.)

Branch Offices: (4 Cannon Street, Manchester. (Tel.: City 52.) 54 Foster's Bldgs., High St., Sheffield. (Tel.: 2458.) 19 Waterloo Street, Glasgow. (Tel.: Central 2329.) Melbourne and Sydney, Australia.

### Contents

No. 7	Series 2493	Vol. 104	
Births .....	227	Information Department .....	228
Business Changes .....	217	Insurance Act Dispensing .....	237
C. & D. Commercial Compendium .....	249	Legal Reports .....	219
Colonial and Foreign News .....	218	Marriages .....	227
Coming Events .....	232	Observations and Reflections .....	229
Company News .....	221	Personalities .....	226
Corner for Students .....	225	Patent Rights Dispute .....	220
Correspondence:—		Pharmaceutical Society of Great Britain:—	
Letters .....	245	Evening Meeting .....	233
Dispensing Notes .....	246	Portuguese Drug House .....	222
Legal Queries .....	247	Poisonings .....	215
Miscellaneous Inquiries .....	248	Recent Patents .....	227
Deaths .....	227	Retail Pharmacist's Union .....	237
Editorial Articles:—		Retrospect .....	248
Compiling a Pharmacopœia—II .....	230	Scottish News .....	217
Decline in Shellac .....	231	Trade Notes .....	228
English News .....	215	Trade Report .....	240
Festivities .....	223	Westminster Wisdom .....	224
French News .....	218	Wills .....	227
Gazette .....	219	Winter Session .....	239
German Trade .....	238		
Ibero-American .....			
Entente .....	222		
Irish News .....	217		

### Insurance Dispensing Card

In response to numerous requests for a handy publication on the lines of the well-known *C. & D. Poisons Cards* we have produced an Insurance Card for the use of chemists. This was issued on January 1, and since then a large number have been sold in single cards or in bulk for the use of Pharmaceutical Committees. The card gives in a concise form the details of the pharmaceutical service under the National Health Insurance Acts. The information, which is printed on both sides of the card, deals on the front with medical benefit, how to become an Insurance chemist, the chemists' contract, the Insurance Committee's agreement, the issue of the prescription, dispensing prescriptions, payments to chemists, deductions and allowances, and with the different methods in vogue in Scotland. The reverse of the card is devoted to the drug tariff, the method of calculating charges, the scale of dispensing fees, deposit rates for containers, and list of appliances, with explanatory notes.

The card is sold at the following prices for *cash* with order:—

	s.	d.
Per card, post free .....	1	0
3 cards .....	2	9
12 cards .....	10	0
25 cards .....	20	0
100 cards, carriage paid .....	60	0

## English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

### Committee on Vaccination

The Minister of Health, in conjunction with the Medical Research Council, has appointed a Committee to inquire and report from time to time:—

(1) On matters relating to the preparation, testing, and standardisation of vaccine lymph:

(2) On the practical methods which are available in the light of modern knowledge to diminish or remove any risks which may result from vaccination:

(3) On the methods of vaccination which are most appropriate to give protection against risk of small-pox infection in epidemic and non-epidemic periods:

and to co-ordinate the work of investigation on these questions in this country and abroad, having regard to corresponding work undertaken by international health organisations. The Committee consists of:—Sir Humphry Rolleston, Bt., M.D., P.R.C.P. (chairman); Dr. F. R. Blaxall; Dr. G. F. Buchan; Dr. A. E. Cope; Dr. Mervyn H. Gordon, C.M.G., F.R.S.; Professor J. C. G. Ledingham, C.M.G., F.R.C.P.; and Mr. J. R. Perdrau, M.B. The secretary is Dr. J. R. Hutchinson, Ministry of Health, Whitehall, S.W.1, to whom all communications relating to the work of the committee should be addressed.

### Poisonings

The following cases of fatal poisoning, among others, have been recorded since our last report:—

At an inquest held at Reading, on February 4, on the body of Margaret Wise, Sulhamstead, it was found that death was due to poisoning by potassium permanganate, self-administered. A medical witness stated that there was but one other case on record of death from the same cause. A verdict of "Suicide while of unsound mind" was returned. [The annual reviews of the Registrar-General for England and Wales show that in the years 1897-1923 inclusive there have been twelve accidental and five suicidal deaths from taking potassium permanganate. —EDITOR.]

An inquiry was held recently at Knighton concerning the death of Albert Francis, motor engineer, who was found dead on the floor of his garage. Evidence was given by a police officer as to the finding of a packet labelled "strychnine" by the side of the body. The officer said he had seen the chemist from whom the poison was purchased and had looked at the poison-register, and he was satisfied that the requirements of the law relating to the sale had been duly complied with. The deceased had purchased 30 gr. and the packet was empty when found. An open verdict was returned.

The East Riding coroner held an inquiry at Beverley on February 2 regarding the death of Frances A. Tanfield, a nurse, who died at her mother's house. Dr. Scott said he had known the deceased professionally for about five years. On searching the room he found some tablets in a bottle which was not marked "poison," but one in which tablets were usually sold. The tablets were iodide of mercury. He had since made a *post-mortem* examination, and found that death was due to acute inflammation consistent with poisoning through having taken one of these tablets. The coroner said that the facts seemed to point to Miss Tanfield having taken the tablet in mistake for a sleeping draught. The jury unanimously accepted this view.

An inquest was held by the Lewisham (London) coroner, on February 9, on the bodies of Laura B. Liddell, Eltham, and her son, Malcolm, aged seven. Another son was reported to be in hospital suffering from poisoning. The husband stated that he had in the house lead arsenate, obtained for spraying trees. It was on a shelf in the kitchen. The Coroner: Is it reasonable to keep a poison like arsenate of lead in a place where food is prepared?—The tin had a very tight cover to it. The Coroner: Well, what matter if it had fifty covers to it if they could be removed? Witness added that he got the poison in the first instance so as to spray his fruit trees, which he did twice a year. The coroner told the jury that on the back of the envelope which contained



the letter left by the deceased woman she had written, "We have taken arsenic." Witness was questioned by a jurymen as to when he purchased the arsenic. At first he said that he bought it many years ago, and the coroner then asked him: Did you tell the police officer on February 4 that last year you had some poison for spraying trees?—Witness: I had some left. The Coroner: That is not a straight answer. The husband subsequently said that he thought he had given the remainder of the arsenic to a neighbour. He had no idea his wife had taken any of the poison out of the tin and put it on one side. The Coroner: Do you keep a maidservant?—Yes, a girl of eighteen. And yet you are in the habit of keeping a pound of arsenic in the kitchen! What a disgraceful thing! The husband said something about the poison being inaccessible. The Coroner: Not accessible to a girl of eighteen or nineteen? Now, don't tell me that. The Husband: She would have to stand on a chair. The Coroner: Is there any reason why a girl of eighteen or nineteen should not stand on a chair? The husband made no reply. The jury found that Mrs. Liddell committed murder and suicide during a state of temporary insanity.

### Birmingham

Extensive premises at the corner of Smallbrook Street and Hill Street have been acquired by Boots, Ltd. [Corrected note.]

A gold medal, to be known as the "Sampson Gamgee Medal in Surgery," has been provided by Professor Leonard Gamgee, in memory of his father, a well-known Birmingham surgeon, who was for many years associated with the Birmingham Medical School.

Complaint has been made in the local Press of the cold atmosphere in shops. Traders complain that when the shop is warm and comfortable the customers stay longer than necessary for a chat, especially in the suburbs, where business often goes with friendship.

At a meeting of the local section of the Society of Chemical Industry, on February 9, Mr. A. W. Knapp (Cadbury Bros., Ltd.) read a paper on "The Drying of Vegetables." He stated that by the apparatus he described the colour, flavour and odour of raw vegetables were fully retained.

Some ancient weighing instruments were described by Mr. W. A. Benton (research department of W. & T. Avery, Ltd.), in the course of a lecture on the history and construction of weighing machines before the members of the Birmingham and Midland Institute Scientific Society on February 3.

### Liverpool

A new pharmacy is to be opened in Myrtle Street.

The annual students' day was held on February 5, and in spite of the very indifferent weather over £3,500 was collected for the hospitals.

Two well-known Liverpool chemists have been seriously ill: Mr. Tom Lloyd, Edge Lane, and Mr. V. H. Robson (Hazel & Robson, Ltd., Rumford Street). Both are making a satisfactory recovery.

John Thompson, Ltd., wholesale druggists, Duke Street, have sent out to their customers a very useful list of proprietary articles that require to be labelled in accordance with the new regulations.

In a case in which an application was made for an off-licence for 55 Castle Street, which premises were also licensed for wine and spirits, Mr. Milne, for the applicant, said there was a great demand for cider, and doctors were ordering it for rheumatism.

### Manchester

The junior section of the Manchester, Salford and District Branch of the Pharmaceutical Society held a dance in the Manchester University Women's Union on February 3. About 100 members and friends attended, and spent a very pleasant evening, the function being considered the most successful ever held by the section.

Mr. Alfred Rée, Ph.D., F.I.C., F.C.S., President of the Manchester Chamber of Commerce for the past two years, is joining the board of the British Dyestuffs Corporation, Ltd. Dr. Rée was at one time in business as a

chemical manufacturer. He was also a founder of the Association of British Chemical Manufacturers, and has been President of the Society of Dyers and Colourists.

### Sheffield

Mr. H. Antcliffe, member of the Pharmaceutical Society's Council, has been elected to represent South Yorkshire on the executive of the National Poor Law Officers' Association.

A whist drive and dance was recently held at the Co-operative Rooms by the staff of G. T. W. Newsholme, Ltd. Mr. A. H. Culverhouse acted as M.C., and was supported by several members of the drug trade.

A meeting of local photographic dealers was recently held at the King's Head Hotel with the object of regulating the prices charged for developing and printing. A meeting of the trade has been called for February 22.

### Miscellaneous

**PROPOSED SHOPPING CARNIVAL.**—In connection with the shopping festival which it is proposed to hold at Chorley in March, the corporation has voted £100 for decorating the town.

**POISON-LICENCE APPLICATIONS.**—Applications for licences under Section 2 of the Poisons and Pharmacy Act, 1908, have been made to their respective local authorities by Mr. J. G. Capon, trading as J. Tucker, Walthamstow, London, E., and by Mr. G. Neale, Folkestone.

**IN THE COURTS.**—In North Shields County Court, on February 4, an order was made for the payment of £3 by Mr. Emley, Neptune Road, Wallsend, being the balance of a penalty of £5 for a sale of Collis Browne's Chlorodyne by an unqualified person.—At Brighton Police Court, on February 9, Mr. Frank Seymour, chemist and druggist, Preston Street, was fined 40s. for having sold a bottle of wine without being licensed for such sale.

**PATIENTS' DREAD OF INSULIN.**—An inquest held at Kenilworth, on February 4, on a diabetic patient named Frederick D. Page, who shot himself, resulted in a verdict of "Suicide while temporarily insane." A local medical practitioner, who deposed that he had been giving Page insulin injections twice daily, said that its cumulative effect was very bad for the nerves, and patients got to dread it. Insulin, he added, was an extraordinarily interesting scientific discovery, but his experience was that the treatment was almost worse than the disease.

**BRITISH INDUSTRIES FAIR BANQUET.**—It is announced that on the occasion of the banquet which the Government is giving at the Mansion House, London, on February 15, to celebrate the opening of this year's British Industries Fair, the speech of the Prince of Wales, in proposing the toast of "The British Industries Fair," will be broadcast from the London Station of the British Broadcasting Company at about 9.30 p.m. Other speakers will include the chairman (Sir Philip Cunliffe-Lister, President of the Board of Trade) and the Foreign Secretary (Sir Austen Chamberlain).

**WINE-LICENCE APPLICATIONS.**—Among the applications for wine off-licences at Brewster Sessions, those of the following chemists have been granted:—Messrs. W. B. Cole, Clare; R. Latto, Woolston; H. S. Nall, Rochdale; C. A. Richardson, Shipley.—At Liverpool Licensing Sessions, on February 9, a chemist who was willing to restrict his sales to medicated wines was asked by one of the magistrates what wine he sold. On the applicant including tarragona and invalid port in his list, he was informed that this was a contravention of the conditions and the stock on hand could not be disposed of under the licence. The application was adjourned.

**DEATH IN HOSPITAL FROM STOVAIN.**—The Westminster coroner held an inquiry, on February 5, concerning the death of Marjorie M. Godden, wife of a joiner, who died while undergoing an operation at Charing Cross Hospital. The house surgeon stated in evidence that stovaine was administered prior to the removal of a gland from the neck: the patient did not flinch when an incision was made, although anaesthesia was not complete. She



collapsed, however, and shortly afterwards died. Other evidence showed that in some way the anæsthetic had got into the circulation, producing syncope. A verdict of "Death by misadventure" was recorded.

**FATAL EXPLOSIONS.**—Owing to the breaking of a bottle containing ether during an operation at Mansfield Hospital, on February 6, an explosion occurred through the fumes spreading to a fire fourteen feet away, and the ward was soon in flames. It appeared that the operating surgeon had asked the sister to fetch him another instrument. As she turned to do so, her skirt caught a bottle of ether. This broke on the stone floor, and the fumes were ignited by the fire in the ward. Two patients jumped from their beds and escaped, but a young miner, Albert Green, who was under the anæsthetic at the time, was burned about the head and died later in the day.—As the result of a recent explosion in the boiler house at the premises of The British Xylonite Co., Ltd., Hale End, London, E., two workmen were killed and one was slightly injured.

**BRITISH OPTICAL ASSOCIATION.**—A special general meeting of the members of the British Optical Association will be held at 2.15 p.m., on February 24, in Clifford's Inn, London, E.C.4, when the subjoined resolution will be proposed: "That an additional clause be added to Article 66 of the articles of association to read as follows:—

"66A. Every Colonial and Overseas member shall be entitled by the payment to the Association at any one time (in addition to any annual fee or subscription previously paid by him), if over the age of 50 years, of the sum of ten guineas, and if over the age of 40 years of fifteen guineas, and if over the age of 30 years of twenty guineas, and if over the age of 25 years of twenty-five guineas, and if over the age of 21 years of thirty guineas, to be elected a life member, and after his election to such life membership he shall not be liable to make any further annual subscription to the funds of the Association. Provided also that any member of the Association resident in Great Britain, having paid his annual subscription to the Association for 35 years or more, be elected a life member without payment of any further subscriptions to the funds of the Association."

The annual general meeting will be held at the same place immediately following the special general meeting.

## Scottish News

### Brevities

It is proposed to hold a shopping week in Hawick shortly.

Boots, Ltd., have opened a branch at 113-115 High Street, Dumfries.

The first of a series of four lectures on "Town Botany in Winter" was given in Glasgow University, on February 6, by Professor J. M. F. Drummond, F.R.S.E. The subject of the first lecture was "Seeds and Seedlings," and that of the next one, to be given in the Botany Department, on February 13, will be "Bulbs."

### Edinburgh

Mr. J. Buchanan, chemist and druggist, has commenced business in Bridge Street, Leith.

Mr. F. Hart, chemist and druggist, has recently commenced business at Spring Gardens, Stockbridge.

"On the Edinburgh list of National Health Insurance practitioners," writes a local chemist, "there are five or six of the worst writers I have ever encountered."

### Stirling

Mr. Donald McGregor, chemist and druggist, late of the Federated Malay States and Straits Settlements, has been assumed a partner in W. J. Moore & Son, chemists, 28 Murray Place, as from December 1.

Mr. William C. Yule, chemist and druggist, has acquired the business of ex-Provost J. Raffan, chemist and druggist, 16 Port Street, where he has occupied the position of senior assistant for some years. Mr. Yule also served his apprenticeship with Mr. Raffan.

## Irish News

### Brevities

At Portadown Town Council Mr. John Sandford, R.D., was unanimously appointed vice-chairman for the ensuing year.

At an inquest held on February 5, at Magherafelt, co. Derry, on the body of a married woman, Sarah A. Kennedy, aged 32, who drank disinfectant, a verdict of "Suicide from poisoning while temporarily insane" was returned.

At a meeting of mineral waters manufacturers and wholesale bottlers held in Cork, recently, it was decided to call a conference of the trade in Munster to consolidate the interests of the industry. The abolition of the duty on table waters was condemned.

In the Northern Irish King's Bench, on February 2, an application for bail was made in the case of Annie Curry, committed for trial on December 29, on a charge of the murder of her infant child, Violet Love Curry, by poisoning her with lysol. Bail in £100 and two sureties in £50 each was allowed.

Among the many activities of the late Mr. W. F. Wells, a past-President of the Pharmaceutical Society of Ireland, whose career was outlined in the *C. & D.* of February 6 (p. 191), was his interest in the Fairchild scholarship, of which he was for a long period a trustee. This office, particularly in the early years of the scholarship, involved a considerable amount of work.

The annual meeting of the North Irish Pharmacists' Association will be held on February 17 in the Y.M.C.A. Wellington Place, Belfast. Pharmacist members of the Council of the Society have been asked to address the meeting. It is proposed to alter rules so that members can obtain *THE CHEMIST AND DRUGGIST*, and be members of the Pharmaceutical Society of Northern Ireland. By this means three subscriptions will be amalgamated, and members will save from 12s. to 20s. per year.

### Belfast

Miss Kathleen Robinson, who was apprenticed with Mr. Samuel Hogg, Ph.C., and was also assistant with him for a few years, passed the recent Pharmaceutical Licence examination.

At Belfast and District Chamber of Trade, recently, the President (Mr. W. J. Hardy, Ph.C.), referring to the question of the English mails, said the Business Committee concluded that they should use their influence to have the English mails conveyed to Belfast by the Kingston and Holyhead route. It would be something like a gesture to their friends in the Free State if they reverted back to the old route. After discussion it was decided to consult the Chamber of Commerce and other bodies with a view to unanimity of action.

## Business Changes

MR. WILLIAM C. JOHNSTON, chemist and druggist, has purchased the business of Mr. W. H. Croasdel, chemist and druggist, Main Street, Frizington.

MR. W. OWEN EDWARDS, chemist and druggist, of Aberystwyth, has taken over the business of the late Mr. E. Lima Jones, chemist and druggist, Aberystwyth, as from February 1.

**LOOKING INTO THE FUTURE.**—Lecturing at Oxford, on February 5, on "Civilisation and Chemistry," Sir Max Muspratt, chairman of the United Alkali Co., Ltd., said that the time would come when, instead of being dependent upon nitre from South America, every agricultural property in this country would be self-contained in the matter of necessary fertilisers. This had already been done in our Colonies and in Germany. The time was perhaps not so far distant when coal and coke would be crushed into pulverised fuel and burnt to produce electricity. It was not difficult to imagine the gases freed by this process being sent on to the sugar factories to be converted into sugar to feed the whole of the population of this country.



## French News

From the "C. & D." Paris Correspondent

**THE ASSOCIATION OF PHARMACISTS OF THE SEINE DEPARTMENT** celebrated the centenary of its foundation on February 4 by a banquet, at which some 500 were present, M. Durafour, Minister of Labour and Hygiene, occupying the chair.

**UNPOPULAR TAXATION.**—As a protest against the "fiscal unfairness" of the Government, the shopkeepers of the rue Saint Honoré closed their establishments from 4 to 5 p.m. on the afternoon of February 4. From the Louvre to the rue Royale practically all the shops, including the pharmacies, joined in the movement.

**THE SOCIETY OF FRIENDS OF THE PARIS FACULTY OF PHARMACY** is now definitely constituted. A board of thirty pharmaceutical notabilities was first nominated, and these selected the officers of the new society: M. Famel, president; MM. Barthet, Billon, Buisson, and Comar, vice-presidents; MM. Bousquet, David and Leprince, secretaries; and M. L. G. Toraude, treasurer.

**STATUS OF OPTICIANS.**—The question whether an optician has the legal right to test and examine a client's eyesight was pleaded before the Paris Court of Appeal last year, and although the opticians had engaged some of the best talent of the bar, the Court decided in favour of the prosecuting oculists. The case has just been carried up to the Court of Cassation, which has confirmed the previous judgment. The Court held that though the sale of spectacles was free, only doctors have the right to prescribe glasses. The optician who examines a client's eyes in order to sell glasses is guilty of illegally practising medicine.

**THE VELLUMS OF THE MUSEUM** are now being exhibited to the public for the first time in three centuries. These water-colours of animals and plants, between 5,000 and 6,000 in number, were executed on vellum by first-class artists under the supervision of scientists, and the collection is kept in the library of the Jardin des Plantes. Some 500 of the most interesting specimens have been placed on loan for temporary exhibition at the Musée des Arts Decoratifs, in the Louvre. The exquisite finish and accuracy of these paintings, as well as the wonderful preservation of their colours—the earliest date from 1631—make the collection well worthy of a visit from anyone interested in botany or natural history. Nicolas Robert (miniature painter to Louis XIV), Joubert, Aubriet, Madeleine Basseporte, and Gerard Van Spaendonck are among the pre-Revolution artists represented. Since then, P. J. Redouté ("the Raphael of flowers") is a noteworthy name.

## Colonial and Foreign News

**PRESCRIPTIONS FOR PHENOLPHTHALEIN TABLETS.**—In consequence of a recent case of poisoning in Vienna, the Austrian health council has issued a recommendation to the effect that tablets containing over 0.2 gram of phenolphthalein should not be supplied except on presentation of a prescription.

**POPPY CULTIVATION IN EGYPT.**—The Egyptian Ministry of Agriculture is considering the advisability of suppressing the cultivation of the poppy in the country, particularly since it has been established that the opium produced in Egypt is not suitable for medicinal uses, on account of its low content—about 7 per cent.—of morphine.

**PHARMACY ASSISTANTS IN JUGO-SLAVIA.**—At the recent extraordinary meeting of the Association of Pharmacy Assistants of Jugo-Slavia it was decided to transfer the headquarters of the Association from Belgrade to Zagreb. Master of Pharmacy Dane J. Hranilović, editor of the "Farmaceutski Vjesnik," was elected president of the Association.

**CO-OPERATIVE BUYING IN EGYPT.**—At a recent general meeting of the Association Internationale des Pharmaciens d'Egypte, held in Cairo, it was decided to establish a central wholesale drug house on a co-operative basis. The scheme includes the provision of a laboratory

in which purchases will be examined and analytical work undertaken on behalf of the members. A commission was appointed to elaborate the statutes of this proposed co-operative drug house.

**UNEMPLOYMENT IN POLAND.**—In common with most other countries, the pharmaceutical profession in Poland is suffering from overcrowding. To reduce the number of unemployed, the Association of Pharmacy Assistants urges that steps should be taken to put an end to the employment of non-pharmaceutical personnel in pharmacies, and further, that men acting as *locum-tenens* should not be permitted to serve in this capacity in more than one pharmacy.

**PROHIBITED IMPORTATION OF EXTRACTS INTO LATVIA.**—In consequence of the discovery that pharmaceutical extracts of foreign manufacture have appeared on the Latvian market found to be deficient in alkaloidal strength, or of which the date and method of preparation is not known, an Order has been issued prohibiting the importation into Latvia of a large number of dry, soft and also liquid extracts, either as such or in combination with other substances. The list contains the names of 84 extracts, among which figure: aconite, aloes, orange peel, belladonna, cascara sagrada, cinchona, digitalis, gentian, pomegranate, hyoseyamus, hydrastis, opium, rhubarb, ergot, nux vomica, valerian, viburnum. All imported extracts figuring in the list must be disposed of within a period of six months, at the expiry of which any stocks found will be confiscated and the holders punished.

**PROFIT ON SPECIALITIES IN GERMANY.**—As the basis of establishing the retail price of pharmaceutical specialities and proprietary medicines supplied in their original packages, the German official drug tariff provides an increase of 75 per cent. on the wholesale cost price to the pharmacist. Considerable perturbation has been caused by the report that it is proposed to reduce this increase to the pre-war level of 60 per cent. In a memorandum to the Government, the Deutscher Apotheker-Verein points out that whereas formerly prescription work constituted the chief portion of the total turnover, now it only constitutes on an average 20 per cent. of the latter, counter sales about the same, while the sale of specialities at present represents about 60 per cent. of the turnover. The profits from prescription work and counter sales are at present inadequate to cover the demands for taxation; the increase of 75 per cent. on the cost price of specialities represents a profit of about 43 per cent., which in the case of supplies to members of sick clubs is reduced by 7 to 15 per cent., but, the memorandum states, the fact must not be overlooked that of the 6,000 pharmacists in business approximately one-quarter derive an income which is less than the salary paid to a middle-grade civil servant, and that the majority are just able to live very modestly.

**RUSSIAN PHARMACEUTICAL INDUSTRY.**—The chemical industry in Soviet Russia is officially classed into forty-five groups. Of these the "Pharmatrest" includes the following works: The alkaloid factory; the pharmaceutical works formerly belonging to the Moscow district association; the chemical works of E. Schering; the bacteriological laboratory of Blumenthal; the chemical works of K. Ferrein; the chemical works of R. Köhler & Co.; the chemical works of Allen & Hanburys; and two wholesale drug depôts. These employ 600 workmen, with an annual production of 254,128 kilos of chemical products and 99,832 kilos of galenicals. The scientific chemico-pharmaceutical institute in Moscow has elaborated a method of extracting iodine from the water of the naphtha wells, and an experimental plant is in course of erection near Baku which is expected to yield about 16 kilos. of iodine daily. Lactic acid is now being manufactured by a new and cheaper process direct from inverted starch, and the residues from the manufacture of glucose are being utilised for the production of pytin. In addition to inorganic salts, a large range of organic compounds and alkaloids is now being manufactured, for which Russia was formerly dependent upon Germany for supplies, and special attention is being paid to improving manufacturing processes, while every effort is made to utilise existing national resources.



## Legal Reports

**Uncustomed Saccharin.**—At Mansion House Police Court, London, on February 4, Johannes J. Jut, a Dutch traveller and agent, was charged on remand with attempting to evade the Customs duties on the importation of 448 lb. of saccharin and with harbouring an additional 100 lb. of saccharin with intent to avoid payment of the duties. Mr. Gibson, prosecuting, said that on January 14 the defendant imported into London from Rotterdam fifty bags of rye flour. A Customs official prodded one of the bags and encountered a hard substance. The bags were opened, and thirteen were found to contain smaller bags of saccharin weighing 448 lb. At the defendant's office in Great Titchfield Street three similar bags, with smaller packages of saccharin, were found. The defendant, on oath, denied knowing that saccharin was being imported. Fines amounting to £5,383 were imposed.

**Trade-Mark Forgery.**—At the Old Bailey, London, on February 5, John May, dealer, was charged, under the Merchandise Marks Act, 1887, with having forged a trade-mark and with having in his possession for sale goods to which a forged trade-mark had been applied (*C. & D.*, II, 1925, p. 856). It was stated for the prosecution that Mr. Walter S. Galloway, Seaford, was the proprietor of the "Union Jack Paste," an ointment for the feet, registered in 1916. May was a stallholder in Caledonian Market, and sold boxes of ointment attached to cards bearing a printed design similar to that of the cards bearing the prosecutor's goods. On May's premises were found printing materials and other articles which, it was suggested, might have been used for printing cards similar to those used for the genuine "Union Jack Paste." Mr. Walter Frampton was leading counsel for the prosecution, and Mr. E. H. Coumbe appeared for the defence. The accused was sentenced to six months' imprisonment in the second division, and was ordered to pay £25 towards the costs of the prosecution.

**Injunction Granted.**—In the Chancery Division of the High Court, London, on February 9, Mr. Justice Lawrence had before him a motion in the action of Ashton & Parsons, Ltd., against C. G. Weller and G. M. Russell (trading as the People's Proved Prescriptions). Mr. Moritz, K.C., for the plaintiffs, said that the motion was for an injunction to restrain the infringement of a registered trade-mark "Phosferine," and passing off as Phosferine something that was not Phosferine. Mr. Patterson (for the defendants) and he had discussed the matter, and had been able to arrive at a settlement. With his lordship's consent the motion would be treated as the trial of the action. Judgment was asked for only against the defendant Russell, who would submit to a perpetual injunction in the terms of the writ and would pay the taxed costs. Plaintiffs waived their inquiry as to damages. Mr. Patterson said he admitted that the defendant had done something wrong, but what had been done had been done in direct breach of instructions given by him. It was, however, done in good faith. His lordship consented to the injunction being made on the terms stated by Mr. Moritz.

**Excess of Moisture in Saffron.**—At West Penwith Petty Sessions, on February 4, Stanley Turner, grocer, Marazion, was charged with having sold saffron which was below the British Pharmacopoeia standard. It was stated that an inspector visited defendant's shop and purchased two drachms of saffron for 1s. 4½d.; a portion lost 23.1 per cent. of moisture on being dried at 212° F. The sample left with Mr. Turner had been submitted by him to an analyst, who reported that it lost 13.3 per cent. of moisture. The defendant, who pleaded "Not guilty," stated that he was supplied with the saffron by an Exeter firm, who guaranteed its purity. Directly the sample was taken by the inspector he wrote to the firm informing them that he would hold them responsible for anything that might happen. They replied that they had supplied this saffron to customers all over the country, and had never had any prior complaint. They asked for a sample of defendant's stock, and were supplied with the sealed portion left by the inspector. This was analysed by the Devon county analyst. The

humidity of the atmosphere of the district was a difficulty which grocers in the district had to contend with. The magistrates, remarking that they did not believe there had been any intentional adulteration, fined the defendant 5s., including costs.

**Arsenic in Imported Apples.**—At Marylebone Police Court, London, recently, Walter E. Camp and William A. Champ, fruiterers, with addresses in Hampstead, were summoned for having sold apples containing arsenic to the extent of  $\frac{1}{10}$  gr. and  $\frac{1}{10}$  gr. per lb. respectively. The medical officer of health for Hampstead, giving evidence, agreed with the finding of the Royal Commission on arsenical poisoning that anything over  $\frac{1}{10}$  gr. of arsenic per lb. in food was dangerous.  $\frac{1}{10}$  gr. per lb. was absolutely dangerous. The magistrate asked if there was danger in eating one apple. Witness: One apple might upset a boy, but a boy doesn't restrict himself to one. There is danger in two apples eaten raw. The only apples affected, he added, were those from the United States. Cross-examined, the witness said he had found that the arsenic permeated to the core of the apple, although most of it was on the skin. The Magistrate: Can this be got rid of by washing?—No, it can only be partially got rid of by washing, because arsenic is present in the form of arsenate of lead, and that is not soluble in water. Our analyst has also made experiments which show that the arsenate of lead forms a compound in the skin of the apple which cannot be removed by any other means except peeling. The summonses were dismissed on payment of costs.—At Stratford (Essex) Police Court, on February 3, similar summonses against W. Prentice & Co., fruiterers, Ilford, and other traders were dismissed on payment of costs.

**Action for Alleged Wrongful Dismissal.**—In the King's Bench Division of the High Court, London, on February 5, Mr. Justice McCardie decided an action brought against the London Essence Co., Ltd., Camberwell, by Mr. Harold A. White (*C. & D.*, January 16, p. 78), who sued for damages for alleged wrongful dismissal from the position of general manager of the defendant company, and for certain commission. The plaintiff also claimed an injunction to restrain the defendants from transferring shares of the defendant company belonging to him, and an order reinstating him as a director of the defendant company. The defendants disputed the claim and denied liability, and on their behalf evidence was given alleging that the plaintiff frequently stayed away from the business. Giving judgment, Mr. Justice McCardie said that in the general history of the case there was little dispute. The plaintiff became a director of the company, and he got shares, some by gift from his father and some by gift from his uncle, the total being about 8,000. The first question for decision in the case was whether or not an agreement was entered into, as the plaintiff alleged, in 1917, whereby he should get 10 per cent. on the net profits of the business. He (his lordship) was satisfied from the evidence that no such agreement was made. He was also satisfied from first to last in the history of the case that the uncle had acted not as the enemy of the plaintiff, but as a friend. His lordship could not see the faintest justification for any attack on the uncle. He was bound to say that the plaintiff was a most unsatisfactory witness. Plaintiff was removed from his position of director in July 1924, and in that matter his lordship could not see any trace of any ill feeling on the part of the uncle. He thought the uncle acted *bona fide* for the benefit of the company. It was intolerable that plaintiff, as a paid manager of the company, should go to the South of France without one word of information to his fellow-directors. Plaintiff failed on all points because, rightly removed as he was, it followed that the shares ceased to be his, and went to the company. The claim was dismissed, with costs.

## Gazette

### Partnership Dissolved

BURGESS, J. H. E., and MARTIN, E. J., 12/13 Park Street, East Cowes, I.W., chemists, under the style of J. H. Burgess.



## Patent Rights Dispute

IN the Chancery Division of the High Court, London, on February 3, 4, 8, 9 and 10, Mr. Justice Romer continued the hearing of an action (*C. & D.*, February 6, p. 179) brought by the Commercial Solvents Corporation, Ltd., Featherstone Buildings, W.C., for an injunction restraining the alleged infringement by the Synthetic Products Co., Ltd., City Road, E.C., of their patent, No. 4,845 of 1915, for a process for the manufacture of acetone and normal butyl alcohol.

Mr. Strange, further examined when the hearing was continued on February 3, stated that Dr. Weizmann was present at the conference in May 1912 which led up to the defendant company's patent of that year, but he did not think he was shown a draft of the provisional specification. In connection with the prospectus of the Synthetic Products Co., there was a report signed by Dr. Matthews and himself stating that they had frequently tested in 60-gallon vessels the fermentation process of Professor Fernbach for the manufacture of higher alcohols and acetone, the raw materials being potatoes and maize. In the prospectus itself were references to the proposed use of maize in the production of acetone and butyl alcohol. In his opinion, parts of the plaintiffs' specification 4,845 which could be worked were identical with that of 1912 of Fernbach and Strange, with the exception of the heat treatment, which was not included in the 1912 document, but had been shown to Dr. Weizmann. With regard to things which would not work satisfactorily, he looked upon the claim for aerobic conditions as wrong. The use of air was objectionable in his process for the making of butyl alcohol. When the defendants resumed work at King's Lynn in 1923, they used maize because they thought it was the most reliable material to use, and they could not have used potatoes without installing fresh plant to replace that dismantled by the Government. The defendants invariably used ground maize. Cross-examined: He informed the Government in 1915 that he had a process which could be worked successfully with maize.

In further cross-examination on February 4, Mr. Strange said if he had nobody else to consult he would have been prepared to float a company on the faith of his Rainham experiments with maize. Sir A. Colefax: If your experiments at Rainham were so successful, why did you want Professor Fernbach to repeat these experiments in Paris? Why did you not rely on your records at Rainham?—You are dealing with the public when you are raising money. Fernbach's name was international, and I was a comparatively unknown chemist. Did you ever bring Professor Fernbach over to see maize fermentations at Rainham?—He came over at intervals. You could have had Sir William Ramsay, Dr. Hehner, and Sir William Tilden reporting on it?—We were not thinking that it made any difference to our claim for ownership whether we could work potatoes or maize for prospectus purposes. Why is it, if you could have succeeded on maize, that Dr. Hehner reported on potatoes?—Because I knew that Professor Fernbach was pressing for us to work on potatoes. When the company was floated, Professor Fernbach and Sir William Ramsay dismissed the thing. They were too powerful for my wishes, and so we were forced to work on potatoes. Why did you press Professor Fernbach to make the experiment with maize in Paris?—It was a good place to make it—the Pasteur Institute. It was a good advertising name. I had to think of the effect on the public of what was printed in the prospectus. Mr. Maurice Schoen, assistant to Professor Fernbach at the Pasteur Institute, gave evidence concerning various types of bacilli.

### PROFESSOR FERNBACH'S EVIDENCE

Professor Auguste Fernbach, head of the fermentation department of the Pasteur Institute, Paris, examined on February 8 by Mr. Whitehead, K.C., was asked his view of what was patented in his specification 21,073 of 1912. He said that they had patented a process of fermentation which was unknown up to that time. The object of the process was to obtain through the fermentation of carbohydrates acetone and the higher alcohols in a simultaneous process, the important point being the

single process. He carried out a great many experiments before he applied for the patent, using different materials and different bacilli. While these experiments were being made he thought they might be able to obtain a yield of over 50 per cent. of the starch in the form of acetone and butyl alcohol. That was by relying upon the addition of nitrogen, but he was more sceptical now. His Lordship: Which was the strain of bacilli up to the date of the application which gave the best yield?—On potatoes it was the first "F.B." Professor Fernbach said that at that time he had no doubt that the fermentation of maize was a commercial proposition if the cause of infection could be suppressed. Asked if he preferred potatoes, he replied in the negative, but said they were starting a new process and trying to put it on a commercial footing, so it was useless jumping about from one material to another. He had read a lecture by Mr. Gill to the Society of Chemical Industry, describing the fermentation process carried on at King's Lynn during the war, and he agreed with every word of it. There was no difference at all between that process and the pre-war process.

### WAR-TIME EXPERIMENTS

Cross-examined by Sir Duncan Kerly, K.C.: You say that the process of fermenting the starch of maize so as to produce acetone and butyl alcohol is inherent in all "B. Y.'s"?—Yes. And to make a "F. B." which will give you a good yield of any particular form of starch requires training?—Yes. And it is possible in your view to give a training so as to get a large commercial yield on maize starch?—Yes. And that is your secret?—I do not say it is a secret. It is taken from different papers that have been published. Did it take you years to experiment in Paris before you learned how to do it?—No, not years—months. Have you ever published the process?—No, but not because I was not inclined to do so. I was going to lecture on it at the Society of Chemical Industry during the war, but was stopped. During the war the process was a secret?—Yes. If it is a fact that "B. Y." requires no training, but will give the desired result at once, there must be some difference between "B. Y." and "F.B."?—It depends upon what you call training. I think that the process of applying heat is training. How do you account for the difference in the results of the training?—You cannot train bacteria to give the wished-for results. You must keep on trying. There is also the selection of the source. With regard to infection, Professor Fernbach said that a single test of looking at a slide under a microscope was not sufficient to enable infection to be detected. Sir Duncan: But you are the most skilled bacteriologist in Europe?—I think that is an exaggeration (laughter). During the war, witness said, the French Government were anxious to get supplies of acetone by the fermentation process, and he gave a demonstration at Melle in September 1916. Sir Duncan: Was that not a failure, and did the French Government then send for Dr. Weizmann, and after that did they send for you again?—His Lordship: Was Dr. Weizmann's process adopted by the French Government?—Sir Duncan: No, 160 was used. Professor Fernbach said that the French Government used his process with success with subcultures of 160. Mr. Amos Gill, B.Sc., A.I.C., said he was in charge of the fermentation processes at the defendants' King's Lynn factory from 1916 to 1918, and in 1919 he read a paper describing them before the Society of Chemical Industry.

At the hearing on February 9, Mr. Gill stated that the process he described in his paper was that actually carried on at King's Lynn after the factory had been taken over by the Government. It was an anaerobic process. He had recently visited the defendant company's premises, and had examined the way in which they carried out their process. Mr. Swan: Is the manner in which they carry out their process at present in any way different, and, if so, how, from the manner in which the process was carried out during your time at King's Lynn?—It is carried out in an exactly similar manner. Dr. John M. Goldsmith, consulting chemist, Chancery Lane, E.C., Mr. Julian Baker, a bio-chemist and editor of the "Journal of the Institute of Brewing," and Mr. John L. Yuill, bacteriologist, gave evidence in support of the allegation of insufficiency of description in Dr. Weizmann's specification. This concluded the evidence.



## CONCLUDING SPEECHES

Mr. Whitehead, summing up for the defendants, submitted that unless the Court was satisfied with the construction which the plaintiffs put on the words in their specification, "will convert the greater part of the starch of maize into acetone and butyl alcohol," he had no case to answer on the question of infringement. If his view on the construction of the words was accepted, there was no infringement. With regard to invalidity, he urged that there was in the plaintiffs' claims no limitation to a fermentation process in which there was no nutritious material added, nor was there any limitation to a particular natural substance; the specification covering the fermentation of any natural substance rich in starch. That was to say, if the ambit of the claims was wide enough to cover potatoes, it was enough for the defendants if they could show prior user on potatoes.

Continuing his argument on February 10, Mr. Whitehead submitted that the plaintiffs' process was not secret. It had been carried out by means of numerous bacteria. He agreed that the particular organism was not disclosed, but urged that, because one particular organism was not made public, it did not constitute a secret process—it was only a particular way in which the process was being carried out. The invention was wholly independent of plant, and therefore the question of whether the plant for working the process was secret was immaterial. Counsel further contended that in law, even although the process was held to be secret, the defendants were protected by the Statute of Monopolies. The question whether a patent could be invalidated by secret user had never been decided. Sir A. Colefax had challenged his right to rely on X160 with respect to prior user, but his reply was that, even if he were limited to reliance on one process, it was not for his friend to make the choice for him. Sir Duncan Kerly: I am going to say that you can rely neither on X160 nor "F.B." Mr. Whitehead said it was essentially a case where the act which was made the basis of the action was in direct continuation of the operations carried on during the prior user. Having dealt with the common general knowledge at the date of Dr. Weizmann's patent, counsel asserted that Dr. Weizmann's invention lay in the selection of the best bacterium for a particular purpose, and that in the state of general knowledge of bacteria then this selection did not require and was not an inventive step. The bodies were there, and a mere selection of one was not inventive. With regard to insufficiency of description in the plaintiffs' specification, Mr. Whitehead said that the document failed to mark the boundary of the monopoly claim, and that there was a plain ambiguity on the essential test of the liquefaction of gelatin.

**POPULAR MEDICAL HINTS.**—A cycling paper recommends a reader to rub his feet with Czjupzt oil. He must have been wearing Russian boots.

**EDUCATING THE PUBLIC.**—In the window of a pharmacy in Chiswick, London, W., the section "Poisonings" on page 109 of the *C. & D.* of January 23 is exhibited on a card with appropriate sentences underlined. A notice below the cutting explains that because of accidents such as the one indicated the public are supplied at this shop with liquid poisons in poison-bottles only.

**BACILLUS IN DUCK'S EGG.**—An inquest held at Stepney, London, E., on February 5, resulted in a verdict to the effect that the death of Selina Vogt, a woman aged twenty-four, was due to poisoning by a bacillus contained in a duck's egg that she had eaten. Mr. John Webster, Home Office analyst, stated that *B. Aertrycke* had been found in enormous quantities in the organs, and Dr. D. L. Thomas, medical officer of health for Stepney, stated that the appearances of the abdominal organs were consistent with those of food poisoning. He sent some of the organs to the bacteriologist of the Ministry of Health, who reported that *B. Aertrycke* was isolated in abundance. It was relatively heat-resisting, so that boiling for a time did not destroy the toxicity. As far as he could make out, continued Dr. Thomas, there had been no record in the United Kingdom of any cases of food poisoning from eggs, but in French literature there were some cases in which ducks' eggs were implicated.

New Companies  
and Company News

P.C. means Private Company and R.O. Registered Office

**GABAIL, LTD. (P.C.).**—Capital £500. Objects: To carry on the business of manufacturers of and dealers in drugs, medicines, medical and surgical appliances, dyestuffs, colours, bleaches, oils and other chemical products, etc. R.O.: 70 and 72 Chancery Lane, London, W.C.2.

**PARTONS, LTD. (P.C.).**—Capital £500. Objects: To carry on the business of manufacturing and exporting chemists, wholesale and retail chemists, druggists, and apothecaries, etc. The directors are: A. Parton and T. F. Egan. R.O.: 457a, New Cross Road, London, S.E.

**LEWIS & BRINSON, LTD. (P.C.).**—Capital £200. Objects: To carry on the business of manufacturers of, agents for, and dealers in all kinds of fancy goods, toilet articles and druggists' sundries, leather goods, surgical goods and instruments, haberdashery, rubber goods and proprietary articles of all kinds, etc. The directors are: W. Lewis and W. J. Brinson. Solicitors: Horner & Horner, Fitzalan House, Arundel Street, London, W.C.2.

**SHIP FUMIGATORS, LTD. (P.C.).**—Capital £2,500. Objects: To acquire the business of a merchant in and supplier of fumigants, disinfectants, deodorisers, vermicides and cleansing materials, either as general merchant, contractor, importer and exporter and general agent now carried on by Alexander K. T. Bulkley, 9 London Street, E.C., as the "Ship Cleansing Co." The directors are: A. K. T. Bulkley and R. J. Johnstone. R.O.: 9 London Street, London, E.C.

**LONDON FUMIGATION CO., LTD. (P.C.).**—Capital £1,000. Objects: To carry on the business of pest and vermin destructors, fumigators by fumigants, vapours, gases and apparatus of any kind, chemists, druggists, etc. The directors are: S. J. C. Mason, and H. A. Schlosser. So long as Bush Beach & Gent, Ltd., and Deutsche Gesellschaft für Schadlings Bekämpfung m.b.H., respectively, hold 40 per cent. of the issued share capital they may each appoint one director. The above directors are the first respective nominees. R.O.: 24 Monument Street, London, E.C.3.

**THE PALATINE CHEMICAL CO., LTD.**—At a meeting held in Blackburn on February 2 it was resolved that this company be wound up voluntarily. Mr. J. P. Duxbury, 27 Richmond Terrace, Blackburn, was appointed liquidator, and a meeting of creditors will be held at the above address on February 18.

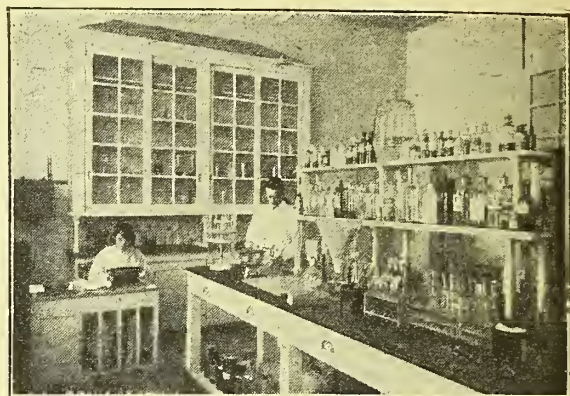
**BOVRIL, LTD.**—A reduction of 1½ per cent. in the dividend is proposed by the directors of Bovril in respect of 1924. The final payment on the Deferred capital will be 6½ per cent., making 11 per cent., tax free, compared with 12½ per cent. The distribution, however, is made on the Deferred capital increased to £1,000,000 in April 1925, when an additional 250,000 Deferred shares were issued, together with a similar number of Preference shares. It is further proposed to again add £75,000 to the reserve, leaving £84,900 to be carried forward, compared with £70,881.

**BORAX CONSOLIDATED, LTD.**—The profits for the year ended September 30 amounted to £425,112, against £426,192 for 1923-24. After deducting the service of the Debenture debt, the year's Preference and Preferred Ordinary dividends, the interim Deferred Ordinary dividend, and placing £30,000 to depreciation reserve (the same), there remains a balance, including £165,733 from last account, of £317,879. It is now proposed to pay a final dividend of 1s. 6d. per share on the Deferred Ordinary shares, making 12½ per cent. for the year (the same), to place £25,000 to general reserve (the same), £5,000 to income-tax reserve (against £10,000), and £5,000 to pensions and grants fund (the same). A balance of £196,629 will then remain to be carried forward. The directors state that the volume of business has been maintained, notwithstanding a considerable amount of competition at low prices from the United States.



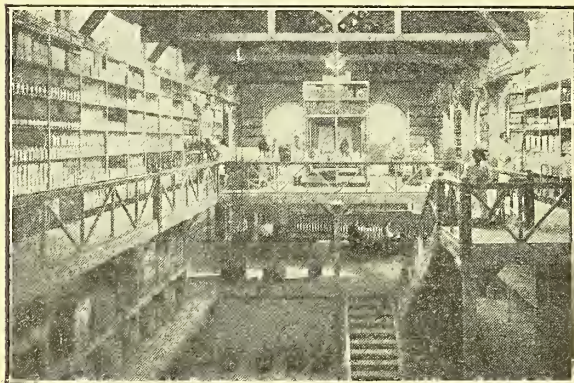
## A Portuguese Drug House

THE Companhia Portuguesa Higiene, Ltda, Lisbon, took over in 1913 the business founded by Senhor E. Estacio, a distinguished Portuguese pharmacist, consisting of his pharmacy situated in the Praça de D. Pedro, to which was attached a wholesale department in the Rua Primeiro de Dezembro, with offices on the first floor, as well as a laboratory for the manufacture of pharmaceutical preparations and specialities in the Rua Viriato. From the first the aim of the company has been to manufacture high-class pharmaceutical products in every respect equal to any imported preparations of foreign manufacture, and under its new management it has shown a progressive development. The original capital of 100,000 escudos has been successively increased until it now amounts to no less than 5,000,000 escudos. Extensive alterations and enlargements were undertaken to cope with the growing expansion of the business. The "Farmacia Estacio" was modernised and refitted to meet the requirements of a growing *clientèle*, and a department for the sale of perfumes and hygienic articles was added. The wholesale department underwent very considerable transformations as business was no longer confined to supplying pharmacies in the capital, but had extended to the provinces, the Azores, and other Portuguese colonies. To deal effectively with this increasing volume of business, par-



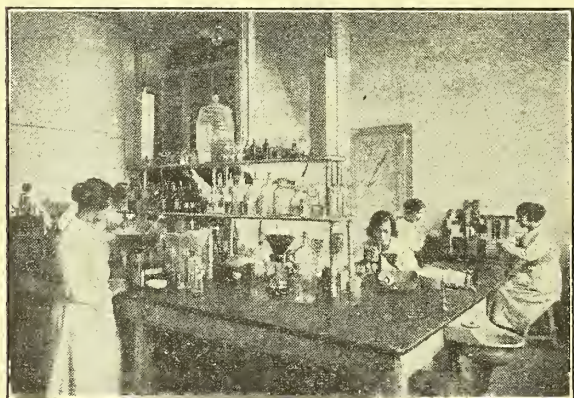
COMPANHIA PORTUGUEZA HIGIENE, LTDA, LISBON.—Interior of the Analytical Laboratory.

solution of hydrogen peroxide, medicated soaps, surgical dressings, ovules, suppositories, tablets, extracts, distilled waters, perfumes, and glassware such as syringes, etc. A private printing establishment has also been provided. The Companhia Portuguesa Higiene, Ltda, Lisbon, with its up-to-date equipment and its excellent organisation, takes a leading place among the establishments of this category in Portugal, and indeed in the whole peninsula. The illustrations fully bear out the claim to possessing modern equipment in its laboratories.



COMPANHIA PORTUGUEZA HIGIENE, LTDA, LISBON.—View of the drug warehouse.

ticularly outside Lisbon, branches were opened in Oporto, Santarem and Coimbra, all of which report excellent progress. The manufacturing plant has recently been equipped with the latest machinery and apparatus, and comprises laboratories for the analysis of drugs and chemicals, for scientific research work, and also for industrial, food, and other analyses. A special laboratory is devoted to the preparation of ampoules, while among the large range of articles manufactured by this important Portuguese firm the following may be mentioned:



COMPANHIA PORTUGUEZA HIGIENE, LTDA, LISBON.—Laboratory for filling ampoules.

## Ibero-American Pharmaceutical Entente

MORE than passing interest attaches to the proposal launched by a distinguished Venezuelan pharmacist, Señor V. M. Ovalles, who makes an earnest plea for the introduction of reciprocity, together with a great measure of uniformity, in matters pertaining to pharmacy throughout the Spanish and Portuguese speaking world. The possession of a common tongue, and the claim to the same racial descent, are urged in favour of an intimate professional *rapprochement* between the young republics of the New World and the motherlands of Spain and Portugal, and as a preliminary step to the realisation of this closer linkage, Señor Ovalles suggests that an international Ibero-American pharmaceutical congress should be convened, at which all these countries would be represented. This congress, he suggests, should be held in Spain, since in King Alfonso XIII resides the soul of a perfect democrat, united with clear intelligence, and a great love of his people. Among the many subjects tentatively put forward for discussion mention may be made of the following:—Establishment of a uniform course of study, with the object of inducing the governments of the countries represented at the congress to recognise the validity of the diploma of pharmacist, on a reciprocal basis, conferred by any university of these countries. The publication of an Ibero-American Pharmacopœia, the creation of pharmaceutical societies, to be joined in a confederation, and also of libraries, museums of the natural products of each country, and of botanical gardens, in order to promote the utilisation of the natural resources of each country: saffron in Spain, cinchona in Peru, ipecacuanha in Brazil, sarsaparilla in Honduras, and balsam in San Salvador, are instance as subjects of considerable practical importance. Naturally, the hardy annual of all international pharmaceutical conferences is again to figure on the agenda: That the whole question of pharmaceutical specialities should be explored, particularly with a view to combating "foreign invasion," a postulate for the elaboration of a law to regulate on a uniform basis the manufacture, sale and advertising of this category of goods in all the participating countries. An exhaustive study of the origin and history of pharmacy in Spain, Portugal and in Spanish America is also suggested by Señor Ovalles, to provide the material for compiling a general history of pharmacy in these countries.



## Festivities

### Folkestone Chemists' Dinner

THE Folkestone Chemists' Association held the annual dinner at the Queen's Hotel on February 3. The President (Mr. F. C. Jones) was in the chair, and the company included Mr. Mallinson (secretary of the Retail Pharmacists' Union), Mr. and Mrs. French, Sittingbourne, and Dr. J. Kingness. Mr. Mallinson replied to the toast of "The Visitors," and Mr. French to the toast of "The Pharmaceutical Society." Miss Curtis and Mr. Spinney provided a musical entertainment, and the evening was altogether most enjoyable.

### Exeter Chemists' Whist Drive

THE annual whist drive and dance of the Exeter Pharmacists was held at Deller's Café on January 27, at which there was an attendance of 250, including the Mayor and Mayoress and the Sheriff and his wife. The prizes in the whist drive were afterwards distributed by the Mayoress, who was thanked on the proposition of Mr. David Reid. The arrangements were carried out by Mr. A. C. Milton, the hon. secretary and M.C., with the assistance of a committee consisting of Mrs. Arnold, Mrs. A. C. Milton, and Messrs. J. Harris, Luxton, and F. Southerden.

### Ipswich Whist Drive

THE Ipswich Branch of the Pharmaceutical Society held the second whist drive and carnival dance of the season at the Arlington Rooms, Ipswich, on February 3, when nearly 100 chemists and their friends were present. The whist drive prizes, provided by various wholesale houses, were distributed by Mrs. J. C. Wiggins, as follows: *Ladies*, Miss Steele, Miss Nunn, Mrs. G. Perrins, Miss M. Taylor, Mrs. E. Catchpole and Miss P. H. Canham; *Gentlemen*, Mr. Davis, Mrs. Ryde, Mr. F. W. Reed and Mrs. Catchpole. During the dance Mr. G. Grave acted as master of ceremony.

### Birmingham Whist Drive

THE Birmingham Pharmaceutical Association held a whist drive on February 3 at Ridgway's Café, over 150 members and friends taking part. Mr. F. Smith (Secretary) acted as master of ceremonies, and Mrs. Bennison, wife of the President, presented the prizes to the following successful competitors:—*Ladies*: Miss A. M. Davies, Mrs. Craig, Mrs. C. Thompson, Miss D. Taylor, Mrs. I. Hurcomb, Mrs. A. Kerkhoff, Mrs. E. Hunt. *Gentlemen*: Messrs. J. W. Upton, M. Georgeson, H. N. Griffiths, E. W. Mann, A. Hunt, and G. D. Moore. The thanks of the Association are accorded to the prize donors.

### Dance at Eastbourne

THE Eastbourne Branch of the Pharmaceutical Society held a dance at the Saffrons Rooms, Meads Road, on February 3. During the evening the President, Mr. H. C. Browne, presented a prize to Mr. Harry Weston for obtaining the highest number of marks in theoretical physics at the local Technical School examination last session. Miss A. Thorpe, who won the prizes in practical chemistry, theoretical chemistry and botany, was to have received her prizes, but was unavoidably absent. There was a good attendance, and an enjoyable night was spent. The Arrangement Committee consisted of Messrs. H. C. Browne, T. Hunnisett, F. J. Crisford, and the Secretary (Mr. D. Marchant).

### Hewlett's Social Evening

THE staff of C. J. Hewlett & Son, Ltd., London, E.C.2, held their twenty-fourth social evening at the Horse Shoe Hotel, Tottenham Court Road, W.1, on February 6. The chair was taken by Mr. Vivian C. Hewlett, Ph.C., and after an excellent dinner the loyal toast was duly honoured. Mr. C. F. Pitt, M.P.S., proposed the toast of "The Firm," which was enthusiastically received with musical honours. The chairman, in his reply, said how glad he was to see nearly 100 members of the staff present, and recalled the time when the earliest social evenings were held in an old City tavern. Mr. E. J. Millard, F.C.S., managing director, also replied. A

short concert followed with songs by Miss Nellie Wilkins, Mr. W. H. James and Mr. N. P. Millard, and humorous items by Mr. Will Horwood. The room was then cleared and the remainder of the evening devoted to dancing, the music being provided by the Gaiety Dance Band. A happy evening terminated with a vote of thanks to the secretary and committee, and the singing of "Auld Lang Syne."

### A Birmingham Event

A SUCCESSFUL DINNER arranged in connection with the Society of Chemical Industry and the Institute of Chemistry (Birmingham and Midland Sections) took place on February 6 at the Engineers' Club, Waterloo Street. Professor A. R. Ling, head of the biological department of the university, and chairman of the local section of the Institute of Chemistry, presided, and those present included: Sir Richard Threlfall, chairman of the Chemistry Research Board; Mr. W. J. U. Woolcock, President of the Society of Chemical Industry; Professor G. T. Morgan, Director of the Department of Industrial Research; Professor W. N. Haworth, Professor of Chemistry, University of Birmingham; Mr. R. L. Collett, secretary of the Institute of Chemistry; Dr. W. E. Sumpner, Principal of the Municipal Technical School, Birmingham; Captain E. C. Bennison, President of the Birmingham Pharmaceutical Association; Mr. Thomas Barclay (Southall Brothers & Barclay, Ltd.); Mr. W. A. S. Calder (Chance & Hunt, Ltd.); Mr. A. W. Knapp (Cadbury Bros., Ltd.); Mr. E. C. Rossiter (British Cyanides); Mr. H. Berry (head of the Pharmacy Department of the Technical School); Mr. G. King, secretary, Birmingham Section, Society of Chemical Industry; Mr. C. J. House, secretary, Birmingham Section, Institute of Chemistry. Mr. Woolcock, in replying to the toast of "The Society of Chemical Industry," observed that during the past year the Society had done much excellent work, both on the scientific and industrial side. There had been during the same period a sort of stocktaking, with regard to the chemical industry, which operated over an enormous field. The industry represented a prodigious capital, and he noted with satisfaction that while the pre-war production of fine chemicals in this country was 70,000 cwt. (the remainder being imported) the production in this country during the past five years had risen to nearly a quarter of a million cwt. The different substances made in this country before the war was 1,400; to-day they numbered between 2,600 and 2,700. The influence of the Safeguarding of Industries Act had been extremely good—a fact which should be gratifying to them as chemists and British citizens. The Society of Chemical Industry was in robust health; it was progressive and capable of rendering great service to the industry and of co-operating effectively with other scientific bodies, and he hoped the effect ultimately would be to reduce their number. Professor W. N. Haworth bore tribute to the splendid work done in the Department of Chemistry at the University by Dr. Morgan, and also to his public spirit and energy. Professor Ling expressed their special indebtedness to Dr. Morgan for coming from Teddington to attend that function, and added that they appreciated the attendance of representatives of the Pharmaceutical Society, and especially of Captain Bennison.

### School of Pharmacy Dinner

THE annual dinner of the School of Pharmacy Students' Association was held on February 5 at the Midland Hotel, St. Pancras, London, the President of the Association, Mr. C. H. Hampshire, M.R.C.S., L.R.C.P., B.Sc., F.I.C., in the chair. There was a large gathering of past and present students, including many of those who have distinguished themselves in pharmacy and other walks in life. Among those present were: The President of the Pharmaceutical Society (Mr. P. F. Rowsell), Professor T. R. Elliott, F.R.S. (Professor of Medicine, London University, and Director of the Medical Unit, University College Hospital), Professor Greenish, Mr. Julian Taylor (Surgeon to the University College Hospital), Messrs. C. A. Hill, D. Lloyd Howard, Harry Martin, R. R. Bennett, F. W. Crossley Holland, H. A. Arnfield, E. A. Umney, Alan Francis, H. Glyn Jones, H. Finnemore, John Evans, W. B. Nelson, H. N. Lin-



stead, Edmund White, J. C. Braithwaite, Miss Braithwaite, Miss Agnes Borrowman, Mr. and Mrs. Want. The toast of "The Pharmaceutical Society" was proposed by Mr. D. G. Dickinson (Bell scholar). Since he knew he was to make this speech, he said, he had been looking up those of his predecessors, and found that they usually gave the history of the Society. He was not going to do that, as his audience knew it probably better than he did. He had wondered why the Bell scholar was chosen; possibly because, having won the scholarship, the Bell scholar would be more grateful than other students to the Society. Well, they were all very grateful. The Society was out to raise the status of the pharmacist, and if it could do that then "more power to its elbow." Mr. P. F. Rowsell, in replying to the toast, expressed his pleasure in being invited. It was the first students' dinner he had attended. He felt that Mr. Dickinson must have taken an interest in pharmacy at a very early age, and he was delighted to find that the students did take an interest in pharmacy generally, for they were the leaders to come. He paid a tribute to the staff of the school, and added that the present session was the most noted for a long time. Part I of the examination had gone. Part II would provide plenty of students, and they would be teaching the new Major course within a year or two. Professor Elliott, who proposed "The School of Pharmacy," said in the course of his address that men in pharmacy seemed to move in the path of distinction on the professional side of the calling. He had known three men in succession at University College Hospital. First Mr. R. R. Bennett; then there was Mr. Woolcock, who had "shot up in meteoric manner," and for him Professor Elliott prophesied still greater things to come—the Woolsack in a Labour Government. Then there was their chairman, Mr. Hampshire, who was also destined for great things. Professor Elliott also referred to the achievements of Colonel Harrison, whom he had met during the war, and paid a tribute to the Dean (Professor Greenish), with whose name the toast was coupled. Professor Greenish, who was greeted with prolonged cheering, referred to the changes that are taking place, perhaps more than they wanted all at once. He was one of those who regretted the departure of Part I students. But it was a necessity, and, in the future, would be an advantage to the school. The present session of the students' association was difficult, subscriptions being at a low ebb, but in future this, he showed, would be obviated. The Physiological Research Laboratory had necessitated changes in the disposition of the rooms at the Square, and these alterations the Dean related in detail. The Pharmaceutical Society, he said, should be the headquarters for all information relating to drugs. The museum, which probably contained 15,000 specimens, was the finest in the kingdom, if not in the world. During the past three or four years 5,000 of these had been relabelled and reorganised. The Curator, he added, was a modest man who deserved a good deal of praise. The Dean closed a lengthy address in optimistic vein regarding the future outlook of pharmacy. Mr. C. A. Hill, in proposing the toast of "The President," alluded to his distinguished career, and, in referring to other famous Bell scholars of the past, said Dr. Hampshire was fit to rank with the best of them. He (Mr. Hill) wished him even greater success in the future. Dr. Hampshire, in a reminiscent speech, recalled his experiences, both as a student and as an examiner, some of the candidates' answers given to questions convulsing his audience. He expressed his thanks for the honour they showed him in appointing him their President. During the evening a capital musical programme was provided, and this, with an excellent dinner previously, provided a highly enjoyable evening.

**CHOOSING AN ADJECTIVE.**—Asked at a recent Lewisham inquest if he could say what one of the exhibits, a bottle of medicine from a chemist's contained, a medical witness said it was apparently a mixture for dyspepsia. The Coroner: It is an interesting colour. The Doctor: An imposing colour. The Coroner: You call it an imposing colour. I suppose anyone would think so who was given a bottle of medicine of that colour.

## Westminster Wisdom

Notes on Parliamentary Matters

### OPTICAL SPECIALISTS

Mr. Briant asked the Home Secretary on February 9 if he will consider the introduction of a Bill to prevent unqualified persons posing as optical specialists?

Sir K. Wood replied that, in view of other commitments, the Home Secretary is not able to consider the introduction of legislation on this subject.

### GENEVA CONVENTION

Major Hills asked the Home Secretary on February 9 whether the Opium Conventions signed at Geneva on March of last year have yet been ratified by His Majesty's Government; if not, what is the reason for the delay, and whether ratification may be expected immediately?

Sir A. Chamberlain: The King's instruments of ratification of the Opium Agreement and of the Dangerous Drugs Convention and Protocol signed at Geneva on February 19, 1925, are in course of preparation, and will be forwarded to the Secretary-General of the League of Nations for deposit within a few days.

### NETLEY HOSPITAL DISPENSING

Sir Wilfrid Sugden asked the Secretary of State for War, on February 8, whether he is aware that medicine supplied to prisoners in His Majesty's prisons is dispensed by or under the supervision of a pharmacist; and if, in view of this, he will replace the non-commissioned officer at present in subordinate charge of the dispensing at Netley Hospital by a person possessing the qualification of pharmacist in order that a sick soldier may have his medicine dispensed subject to proper safeguards?

The Secretary of State for War (Sir Laming Worthington-Evans): The answer is in the negative.

Sir W. Sugden: Is the right hon. baronet aware that the facilities we ask for soldiers obtain in the ranks of the Navy? Why is his Department not able to do what the Navy are able to do?

Sir J. L. Worthington-Evans: This is a question which has been frequently asked and frequently debated in the House, and on the proper occasion I shall be glad to debate it again, if necessary.

A further question was asked on February 9 by Mr. Briant, who was informed that there are no pharmacists at Netley Hospital, but there is a staff of non-commissioned officers and men fully qualified to undertake the dispensing.

### UNQUALIFIED MEDICAL PRACTITIONERS

A debate took place in the House of Commons on February 9 on the following motion by Dr. Little:—That, in the opinion of this House, an authoritative inquiry, with the object of making recommendations to Parliament for dealing with the whole position of irregular practice in medicine and surgery, is urgently necessary. The debate was interesting as showing the strong feeling in the House against the General Medical Council, and plain speaking as to the attitude of medical practitioners to unorthodox methods of curing disease. The Minister of Health declined to vote for the motion or for the amendment, and Colonel Sinclair, a medical member of the House, and also a member of the General Medical Council, "talked out" the motion.

As the outcome of the suggestion made by Mr. Storrey Deans, M.P., in the course of the debate that there should be lay representation on the General Medical Council, there is ground for believing that a recommendation to this effect will be made, though at present no decision or recommendation has been made. Mr. Storrey Deans proposes next week to ask the Minister of Health a question on the line of his suggestion, and it is understood that Mr. Neville Chamberlain will view the idea with favour and go so far as to state that he will make representation to the Lord President of the Privy Council (Lord Balfour), upon whose advice the Crown nominees on the Council are appointed. There are five such nominees, all of whom at the present time are medical men. Within the next few months, when the next vacancy occurs in the ordinary way, it is confidently expected that a recommendation will be made that it is desirable that it should be filled by a layman.



## Corner for Students

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed "Corner for Students, 'The Chemist & Druggist,' 42 Cannon St., London, E.C.4."

### Report on the January Analytical Exercise

THE powder distributed to students on January 12 contained five parts by weight of zinc hydroxy-carbonate, four parts of disodium hydrogen phosphate, and one part of sodium salicylate. The calculated composition of such a mixture is :—

Zn	...	...	...	...	28.7
Na	...	...	...	...	6.6
CO <sub>3</sub>	...	...	...	...	8.8
PO <sub>4</sub>	...	...	...	...	10.6
C <sub>7</sub> H <sub>5</sub> O <sub>3</sub>	...	...	...	...	8.5
H	...	...	...	...	0.1
OH	...	...	...	...	9.9
H <sub>2</sub> O	...	...	...	...	26.8
					<hr/> 100.0

The powder also contained, as impurities, traces of the hydrochloric and sulphuric acid radicals. Samples of the powder were distributed to sixty-nine students and thirty-five reports were received for examination. Zinc was the only constituent which was reported by every correspondent, but the sodium was detected by all but one. The failures in the detection of the acidic radicals were: Carbonic, 5; phosphoric, 2; salicylic, 6. Seventeen students overlooked the evolution of water when the powder was heated in a dry tube. The trace of a chloride was unreported in nine instances, and that of a sulphate in fifteen.

The analysis of this powder has proved a specially noteworthy one in connection with the treatment of it as a phosphate mixture. It has been stated in this column on various occasions that, in dealing with phosphates, it is preferable to remove by filtration any permanent precipitate that may be produced on adding ammonium chloride and excess of ammonia as group reagents, to wash this precipitate thoroughly with hot water, and then to submit it to the appropriate special sodium or ammonium acetate and ferric chloride treatment for water-insoluble phosphates, the filtrate from this precipitate being reserved for separate examination. An alternative and less satisfactory procedure consists in adding to the original phosphate solution ammonium chloride and then ammonia until a precipitate just begins to appear, dissolving the latter in the minimum quantity of hydrochloric acid and afterwards removing the phosphoric acid radical as ferric phosphate in the acetate and ferric chloride separation. The filtrate from this ferric phosphate then contains all the metallic radicals originally present, with the exception of those of the iron group, but together with much sodium or ammonium acetate. It was this alternative process which was almost uniformly employed by our correspondents, and those who adopted it were led away to carry out the wholly needless operation of separating the phosphoric acid radical, owing to their having failed to observe that the precipitate first formed on adding ammonium chloride and ammonia dissolved entirely on the addition of excess of the latter reagent. The complete solubility of this precipitate in ammonia indicated the absence of all the metallic radicals except those of the zinc and the alkali groups, a point which only two students recognised and used as a guide with respect to the composition of the mixture. If the true state of matters had been more commonly recognised at this stage there should not have been so many reports of the presence of calcium and of magnesium as students' papers contained.

Having obtained a yellow precipitate with the nitric-acid solution of ammonium molybdate, which might indicate the presence of a phosphate or an arsenate (or, possibly, of an arsenite originally, which had become oxidised to an arsenate on applying the molybdate test), a number of students tested for an arsenite by passing hydrogen sulphide through the original hydrochloric acid solution, and, as no precipitate was formed, they next added crystals of sodium sulphite and boiled (to reduce

arsenate, if present, to arsenite). Then, having boiled out sulphur dioxide, they tested again by means of hydrogen sulphide for arsenite. This sulphite treatment was not by any means the quickest way to ascertain whether or not an arsenate was present. All that was requisite for a qualitative test was to add to the acid solution which already contained hydrogen sulphide as test reagent for an arsenite, a drop of a solution of sodium thiosulphate. Had an arsenate been present part of it would have been reduced by the thiosulphate, and a yellow precipitate of arsenious sulphide would have been instantly visible. If sodium thiosulphate added under these conditions does not produce an immediate yellow precipitate, the absence of arsenate is indicated. Any students unfamiliar with this reaction should examine it by adding successively to a solution of an arsenate, in the cold, dilute hydrochloric acid, solution of hydrogen sulphide, and sodium thiosulphate solution, and observing what takes place.

In employing ferric chloride solution as a test for acidic radicals, a few students failed to observe the colour reaction due to the salicylate. It is probable that the production of the colour was prevented owing to the ferric chloride containing too large a proportion of free acid. A solution which is nearly neutral should be employed, so that free hydrochloric acid may not unduly interfere with the colour production.

### PRIZES

The First Prize for the best analysis has been awarded to :—

EDITH M. BRATLEY, 61 Francis Street, Leicester.

The Second Prize has been awarded to :—

T. FARLAM, 117 Monton Road, Eccles.

*First Prize.*—Any scientific book that is published at a price not greatly exceeding fifteen shillings may be taken as a first prize.

*Second Prize.*—Any scientific book which is sold for about seven shillings and sixpence may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book or books they select.

### MARKS AWARDED FOR ANALYSES

E. M. Bratley (1st Prize)	...	95	Nom de Plume	...	83
T. Farlam (2nd Prize)	...	94	R. F. S.	...	82
E. L. C.	...	92	Synergidae	...	82
Glauber	...	92	Crispin	...	81
B. H. F.	...	90	Kudos	...	81
Moi	...	89	Ailsa Davis	...	80
H. E. P.	...	88	Brock	...	78
Peter	...	88	Nil Sine Labore	...	78
W. T. H.	...	88	Swot	...	77
Analyst	...	87	D. C. V.	...	72
Aspro	...	87	Tryer	...	72
Rhei Co.	...	86	Kemi	...	70
A. T.	...	84	Zingiber	...	69
Impirist	...	84	Altiora Peto	...	66
Cascara	...	83	Erg	...	64
G. H. B.	...	83	Hyoscyamus Niger	...	56
Meg	...	83	Tonco	...	53
			Precipitate	...	51

### TO CORRESPONDENTS

E. M. BRATLEY.—A precipitate produced on adding mercuric chloride to an aqueous extract from the powder must have been due to the phosphate or the salicylate which that extract contained, or to both. As the carbonate was an insoluble one, the extract did not contain either carbonate or bicarbonate. The use of mercuric chloride as a test to distinguish carbonate from bicarbonate in solution may be ineffectual in the presence of other acidic radicals.

T. FARLAM.—Your position on the list would probably have been different if you had recognised the extreme simplicity of the treatment required in dealing with the powder as a phosphate mixture and had carried out your analysis accordingly. See the general remarks.

E. L. C.—In common with many other students, you carried out a wholly needless separation, as ferric phos-



phate, of the phosphoric acid radical. Note that sodium would not be precipitated as phosphate in Group III—a possibility which you appear to have imagined. The powder did not contain a recognisable trace of calcium, hence the calcium which you found must have been introduced in some way in the course of the analysis.

H. E. P., W. T. H. and others.—The reactions which you attributed to aluminium must have been due to some zinc which had separated in the operations preliminary to the elimination of the phosphoric acid radical.

A. T.—The abundant evolution of water when the powder was heated in a dry tube should not have escaped your notice; or, if observed, it should have been reported. Do not ignore water, although it is a very familiar substance. Silica can be distinguished from alumina by evaporating to dryness with concentrated hydrochloric acid and igniting gently, whereby the former is rendered quite insoluble in boiling moderately concentrated hydrochloric acid, while the latter dissolves in this acid, yielding a solution which gives the reactions of aluminium.

IMPIRIST.—In testing for arsenate you mention adding one or two crystals of sodium thiosulphate after passing hydrogen sulphide. Why use crystals? A single drop of a solution of the thiosulphate is all that is requisite for a qualitative test—concerning which, see the general remarks. Perhaps you wrote thiosulphate inadvertently instead of sulphite.

MEG.—The statements in your report are much too vague and general. For example, you write: "No precipitate was brought down by any of the group reagents." What about the zinc? Again, you represent in two places silver nitrate as giving white precipitates; in one case you adduce this as evidence of the presence of a chloride, in the other as evidence of that of a salicylate, without a word of explanation, and you omit, in both cases, any indication of the nature of the solutions to which the reagent was added, or of the modes of their preparation. At the same time, however, the general accuracy of your conclusions seems to indicate that your report does not do your analysis full justice.

CRISPIN.—You will see from the quantitative composition of the powder that the carbonic acid radical amounted to nearly nine per cent. This is much more than what could properly be called a trace.

AILSA DAVIS.—A careful repetition of the test for manganese which you report failed to indicate the presence of a trace.

SWOR.—The odour of phenol was very noticeable when the powder was heated in a dry tube. This should have been recognised, and its cause sought for.

D. C. V.—Carbon dioxide was evolved quite freely when the powder was heated with dilute hydrochloric or sulphuric acid. It is not easy to understand how you failed to observe the escape of gas bubbles in this test.

TRYER.—Ferric chloride would not yield any precipitate of ferric phosphate in a nitric acid solution of the powder, since ferric phosphate is easily dissolved by dilute nitric acid.

KEMI.—The coloration due to zinc, on heating on charcoal with cobalt chloride, is green, not pink.

ZINGIBER.—The formation of a white precipitate with silver nitrate is not evidence of a phosphate, since silver orthophosphate is yellow.

HYOSCYAMUS NIGER.—You should have described what you did in order to prove iron, chromium, and aluminium to be absent: Mere statement that they were proved absent is insufficient. Your evidence for a sulphide is stated very circumstantially, but sulphide was not present.

TONCO.—That heavy, curdy, white precipitate with silver nitrate which you attributed to a chloride was not due to chloride present in the powder as sent out. You may have introduced a chloride somehow in the course of your analysis. We have found the chromyl chloride test for chlorides distinctly uncertain when small quantities are concerned: a positive result may be relied upon, but in our experience a negative result does not necessarily mean that chloride in small proportion may not be present. The recognition of traces of magnesium calls for special care. The best test available is that involving the formation of ammonium magnesium phosphate and the recognition of the shape of the crystals of that substance under the microscope.

## Personalities

MR. A. R. DREW is now associated with the Chemical Supply Co., Ltd., Abbey Road, Barking, E., as town representative.

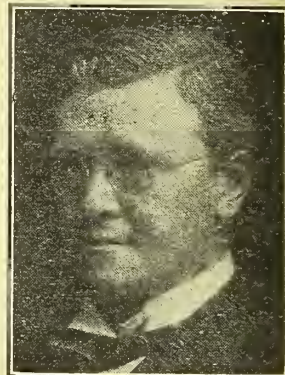
MR. R. C. WALSHAW, chemist and druggist, Huddersfield, has successfully contested a municipal by-election in Marsh Ward, polling 1,492 votes, against 283 given for his opponent.

MR. W. W. WOOD, A.R.I.B.A., son of Mr. Uriah Wood, chemist and druggist, Arnold, has been appointed Assistant Professor of Architectural Design at the State Polytechnic School, Cairo.

AMONG those present at the annual banquet of the Royal Warrant Holders' Association, held at the Hotel Victoria, London, on February 2, were Messrs. A. R. Arrowsmith, W. Edwards Booth, G. Y. Gibbs, W. H. W. Idris, N. F. Kingzett, F. A. Lawman, Robert Pears, and Major Wigginton.

MR. R. WHITELEY BROWNLOW, J.P., pharmacist, Melton Mowbray, was among those present at the Farmers' Union annual dinner, on February 4, and to him was allotted the duty of responding to the toast, "The Town and Trade of Melton." Those present included the Prince of Wales, the Duke of York, and Prince Henry.

MR. E. J. SHORTT, director of the Old Strand Chemical and Trading Co., Ltd., Ely Place, London, E.C., has now returned from his first trip to the United States. The Old Strand Chemical and Trading Co., Ltd., represent in England S. B. Penick & Co., of New York, which firm recently purchased the business and goodwill of the well-known firm of P. E. Anderson & Co., and have also lately added to their organisation the crude drug departments of Lehn & Fink, New York, and Smith, Kline & French Co., Philadelphia. With these additions the firm is now the largest of its kind in the United States. An opportunity was afforded Mr. Shortt to visit Messrs. Penick's mills and factories at Weehawken, and to compare the method of grinding drugs, roots, etc., with those generally prevailing on this side. In the grinding department generally the old stone roller system is replaced by high-speed steel machinery with a greater output and lower running costs. Before taking into stock consignments of botanicals from collecting stations, or importations from abroad, such botanicals as call for physiological tests are so examined, and among them may be mentioned aconite root, cannabis indica, digitalis leaves, ergot, and strophanthus. At the time of Mr. Shortt's visit the evidence pointed very strongly to higher prices for most botanicals indigenous to America, and we have had on this side definite evidence in the case of deertongue leaves, hydrastis, senega, damiana, etc. Owing to the high overhead charges, higher rates of profits are necessarily sought for and obtained by the drug and chemical trade generally right down to the retail trade, but there is very little tendency to question the prices by the retail buyer. The favourable condition in the drug and chemical trade which was in evidence in New York, was prevalent throughout all of the other important centres visited by Mr. Shortt, notably in Detroit, where the gratifying condition of business in the previous year was commented upon by Parke, Davis & Co. and Fred Stearns & Co. After several weeks' travelling through the Middle West, Mr. Shortt concluded his visit with a short holiday at Miami, Florida.



MR. EDWARD J. SHORTT



## Births

Notices for insertion in this column must be properly authenticated.

**GREENSTREET.**—At Ellesmere Road, Sheffield, on February 3, the wife of George Knowles Greenstreet, chemist and druggist, of a son.

**PICKLES.**—At Strait Top, Dalry, on February 2, the wife of C. Pickles, chemist and druggist, of a daughter (stillborn).

## Marriages

**BURNS-LAWLER.**—At the Royal Arch Halls, Edinburgh, on February 9, Reginald Abercrombie Burns to Georgan Smith, younger daughter of the late Mr. H. Lawler, chemist and druggist, Milnathort.

**NEAL-WYLES.**—At St. Paul's Church, Clacton-on-Sea, on January 30, Leonard James Neal, chemist and druggist, Weston-super-Mare, to Florence Hilda, second daughter of Mr. Chester Wyles, Clacton-on-Sea.

## Deaths

**HARDCASTLE.**—At his residence at Ditchling, recently, Mr. Stephen Barnabas Hardcastle, retired chemist and druggist, aged seventy-five. The business carried on by Mr. Hardcastle for more than forty years at 71 East Street, Brighton, was founded (at 4 East Street) in 1810, by Reece & Co., Piccadilly, London, W., as a branch. In the 'fifties it was acquired by Mr. T. A. D. Brew, who for a few years had as partner Mr. H. Schweitzer, the inventor of Schweitzer's Coccatina. Mr. Hardcastle, who was trained in the historic House of John Bell & Co., Oxford Street, London, W., succeeded Mr. Brew in 1880. The business was eventually converted into a private limited company. Mr. Hardcastle was a churchwarden at Holy Trinity Church, Brighton, and was well known in the district.



MR. S. B. HARDCASTLE

**ALCOCK.**—The funeral of Mrs. Alcock, wife of Mr. F. H. Alcock, F.I.C., Ph.C., King's Heath, Birmingham, took place at Brandwood End Cemetery on February 4. The service was conducted by the Rev. H. S. Watts, B.A., Vicar of King's Heath, and the Birmingham Pharmaceutical Association was represented by Messrs. H. H. Marshall, C. V. Thompson, and F. Smith (secretary). There were also present representatives of the "Daily Mail" Christmas Tree Fund, the Citizens' Society, the local cricket club, and the allotment movement, in all of which Mrs. Alcock had been deeply interested. Mrs. Alcock was well known and highly respected by the members of the Birmingham Pharmaceutical Association, and attended with her husband many of the meetings of the British Pharmaceutical Conference.

**BATESON.**—At Wimbledon, London, S.W., on February 8, Mr. William Bateson, F.R.S., D.Sc., director of the John Innes Horticultural Institution, Merton Park, Surrey, aged sixty-four. Dr. Bateson was a recognised authority on botanical and biological subjects. Among his monographs are "Materials for the Study of Variation" and "Mendel's Principles of Heredity." He was a trustee of the British Museum, and during his career received many academic distinctions.

**CHAPMAN.**—At Chesterfield, on January 31, Mr. Percy Chapman, chemist and druggist, Cavendish Street, aged thirty. Mr. Chapman served his apprenticeship at Chesterfield to Mr. J. R. D. Barfoot, chemist and druggist, and qualified in 1920. After further experience in the South of England, he commenced business on his own account less than two years ago. Among the numerous

wreaths at the funeral, which took place at Boythorpe Cemetery, on February 3, was one sent by the Chesterfield and District Pharmacists' Association.

**COLEY.**—On February 6, Mr. Samuel James Coley, chemist and druggist, a director of S. J. Coley, Ltd., chemists, Stroud, aged eighty-three. Mr. Coley had taken an active part in business management till within a few weeks of his death. He had been in the same business for sixty-seven years, and had taken over the full control fifty years ago.

**GREENWOOD.**—At Burnley, recently, Mr. Rennie Mervyn Greenwood, representative of R. Parkinson & Sons, wholesale and retail chemists, Curzon Street, and grandson of the late Mr. Richard Parkinson.

**JENKINS.**—At St. Clears, Carmarthen, on February 2, after a long illness, Mr. Morris William Jenkins, chemist and druggist, aged fifty-five. Mr. Jenkins, who was the son of the late Mr. Jabez Jenkins, chemist and druggist, Llysyfran, went to St. Clears as an assistant, and subsequently commenced business on his own account. He served on several local bodies, and was very popular in the district. Mr. Jenkins leaves a widow and four daughters.

**McGOWAN.**—At Tanga Hospital, Tanganyika Territory, on February 5, Mr. Thomas George McGowan, chemist and druggist, Dar-es-Salaam, son of the late Mr. John McGowan, farmer, Glencaple, Dumfries, aged thirty-six.

**STEWART.**—At 5 Upper Addison Gardens, London, W.14, on January 31, Mr. James Tennent Stewart, Ph.C., 524 Barking Road, E.13. Mr. Stewart passed the Major examination in 1891.

**THOMAS.**—At St. David's, on January 8, Mr. Ivor George Thomas, chemist and druggist, aged twenty-six.

## Wills

**MR. WILLIAM WATSON,** retired chemist, 24 Burns Road, Aberdeen, formerly of Castle Street, Aberdeen, who died on October 14, left personal estate in Great Britain valued at £3,628 2s. 1d.

**DAME MARGARET ADELAIDE HORLICK,** 2 Gloucester House, Park Lane, London, W., widow of Sir James Horlick, founder of Horlick's Malted Milk Co., who died on November 20, left unsettled property in her own disposition of the gross value of £45,866 3s. 6d., with net personalty £30,049 3s. 9d.

**MR. EDWARD MCBIRNEY,** retired chemist, Bayview Park, Kilkeel, Co. Down, who died on October 16, left personal estate in Great Britain and Northern Ireland valued at £1,043 5s. 5d. The testator left his estate to his wife for life with remainder to his grandsons Edward Wallace and Robert Martin charged with the payment of £10 each to his sons Edward and John.

## Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of any British patent can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

**Acridine Compounds.**—A phenyl arsinic acid containing an amino group is caused to act on 9-halogen acridine, yielding acridine-arsinic derivatives possessing therapeutic properties. (Chemische Fabrik auf Aktien. vorm. E. Schering. 230,082.)

**Permanent Emulsions.**—Permanent emulsions of oils are produced by halogenating the oil to such a degree that it has the same specific gravity as the aqueous phase, and then mixing the oily and aqueous phases. (Society of Chemical Industry in Basle. 245,352.)

**Antiseptic Anæsthetics.**—A process of preparing a compound exhibiting antiseptic as well as anæsthetic properties, consisting in causing picric acid and an amino-substituted aromatic acid ester to react in a suitable solvent, and incorporating the resulting compound, e.g., the picric acid salt of *n*-butyl-*p*-aminobenzoate, in an oily base. (The Abbott Laboratories, and F. K. Thayer. 230,089.)



## Trade Notes

**INTERNATIONAL LABORATORIES**, 10 Phoenix Place, Mount Pleasant, London, W.C.1, are giving an extra discount on 6 doz. orders of Parminit, Carmarole Compound, and Karmoid Tablets.

**ATKINSON'S EAU DE COLOGNE**.—J. & E. Atkinson, Ltd., Eonia Works, Southwark Park Road, London, S.E.16, announce new prices for Atkinson's "Gold Medal" eau de Cologne, effective from February 12.

**HIGGOLENE** is the new name for Higginson's Herbalene Skin Ointment, made by Higgozene, Ltd., Upper Bond Street, Hinkley, who are to make it the object of a national advertising campaign. It sells at 1s. 3d. per box.

**LABELLING ORDER**.—De Roos, Johnson & Co., 76-82 Wellesley Road, Queen's Crescent, Kentish Town, London, N.W.5, inform us that Therapion and Dr. Le Clerc's Pills are not affected by the Labelling of Poisons Order.

**PLIAPHANE CONTAINERS**.—Illustrations of various transparent containers are given in the advertisement of Langheck & Co., Ltd., 4 New London Street, London, E.C.3. The Pliaphane containers are made in various colours.



**UCAL GINGER WINE ESSENCE**.—The illustration herewith shows the method adopted by the United Chemists' Association, Ltd., Cheltenham Spa, for packing the Ucal ginger wine essence. It is in the form of a miniature wine bottle. The essence is full flavoured and calculated to make a good product when mixed according to directions.

**SULPHUR TABLETS**.—Chrystoid (Chemists), Ltd., 1-3 Gower Street, Bootle, Liverpool, send us samples of the various sulphur tablets that they are advertising in this issue. These are interesting as showing the desire to meet all requirements of retailers. First of all there are two varieties, one in which precipitated sulphur is used, and the other with flowers of sulphur. Then of each variety there are three flavours, orange, lime fruit, and

raspberry, and, again, three distinct shapes. The advertisement giving the particulars appears in this issue.

**ASHES OF ROSES VANISHING CREAM** is the latest addition to the Ashes of Roses series of toilet preparations. A. Bourjois et Cie, Ltd., 4 Water Lane, London, E.C.4, give details with illustration of the article in their announcement this week.

**PHOTOGRAPHIC DEVELOPING**.—Houghton-Butcher (Great Britain), Ltd., Ensign House, 88-89 High Holborn, London, W.C.1, advertise No. 2 developing system for photographic films. This is a convenient equipment for chemists who have not ordinarily sufficient call for the larger set.

**MR. ERNEST J. GEORGE**, chemists' valuer, 3 St. Paul's Close, Walsall, has appointed Mr. S. F. Clark, 5 Pennard Road, London, W.12, to represent him in the London district. Mr. Clark is prepared to call upon chemists to discuss, free of charge, matters of stocktaking, accounts, income tax, or business purchasing.

**ITONA PRODUCTS**.—We have this week examined samples of Malt, Milk and Egg Beverage, and Vitamine Food made by Itona Products, Ltd., Bardon Chambers, Infirmary Street, Leeds. The Malt, Milk and Egg Beverage is in the form of coarse powder with the full flavour of malt, and mixes to a smooth cream with milk and boiling water. The resulting beverage has a pleasant taste of malt. Vitamine Food is in paste form, and contains malt extract, bone marrow, cream and fruit juice. This is taken as it is with each meal, or can be made into a beverage by means of warm milk.

**RELIEF HOME MASSAGEUR**.—An ingenious home massage instrument is shown in the advertisement of the Relief Home Massageur, 10 Park Grove Terrace, Glasgow. It is useful in cases where professional massage is not obtainable. It does not require electric current and can be used by the patient on himself. The instrument sells at 35s.

**"THE BOTTLE AND GLASS CONTAINER BULLETIN"**, the house organ of the United Glass Bottle Manufacturers, Ltd., has in No. 3 a cover with a design by Mr. G. E. Studdy. The Bulletin, which gives information about machine-made bottles, can be had by sending a postcard request to the company at 40-43 Norfolk Street, Strand, London, W.C.2.

**SCHOOL OF CHIROPODY**.—The Incorporated Society of Chiropractors, 98 Charlotte Street, Fitzroy Square, London, W.1, carry on a School of Chiroprody, of which particulars are given in an advertisement in the *C. & D.*, February 6. Those chemists who are desirous of taking up chiropody should obtain the prospectus of the new course, which commences on May 3.

**THE B.D.H. BOOK**.—The British Drug Houses, Ltd., Graham Street, City Road, London, N.1, have produced an interesting booklet dealing with the past, present and future of the business. Much of this is known to the drug trade, but few will grudge the time taken in reading this pleasantly written account of the many activities of this well-known London house.

**CHARLES ZIMMERMANN & CO. (CHEMICALS), LTD.**, 33 St. Mary-at-Hill, London, E.C., issue, with their February price list of essential oils, a number of pamphlets drawing attention to several of their specialities. These include all orris root products, civet in original (16 oz.) horns, oak moss resin, and a series of baumodors (absolute resins) made by Pilar Frères, Grasse, for whom Messrs. Zimmermann are agents.

**WHITAKER PRICE LIST**.—Whitaker & Co., Kendal, have issued a new price list under the title of "Whitaker's and the Chemist, 1926," which gives particulars of the advertising campaign to be carried through this year in connection with the Luton straw hat and fabric dyes, the Auroral cold water dyes, and the Velt cleaner. Chemists who have not received a copy should send a postcard request for one.

**A NEW VINOLIA POSTER**.—Vinolia Co., Ltd., have issued an attractive poster based on a design specially prepared by Sir Bernard Partridge. This poster will be seen in the course of the next few months in the stations of the London underground railways, and chemists can obtain the poster or a smaller facsimile showcard on application to Vinolia Co., Ltd., Blackfriars, London, E.C.4, or the Vinolia Works, Bebington, Cheshire. The design, in twelve colours, consists of a figure of Britannia with an impression of an old English village scene, surrounded by a blue border, with the Royal arms of appointment and the words "Vinolia—British-made, British-owned—For Fine Toilet Products—Buy British Goods."

## Information Department

### INFORMATION WANTED

P/102. Almond bread, rusks and biscuits	A/281. Horne brand plumbi acet.
N/131. Cyclos thermometers (London agents)	S/231. Lasiosiphon root (source of supply)
B/52. Dinamol ampoules	H/112. Rieger's Transparent Soap (London agents)
B/281. "Foaming" vaginal pessaries	B/52. Sontopron ampoules
	L/43. Zeepyrol

### INFORMATION SUPPLIED

Astonin. B/62	Maclean's Revalenta. B/22
Bromoaspirin. M/62	Magic Foot Drafts. S/22
Campbell's Cherry Cough Cure. D/32	Mutesco Hair Tonic. K/52
Cinderella Silver Shoe Cleaner. W/43	Panbiline. L/62
Creoline. B/22	Perol. N/22
Cushie Hair Brushes. G/22	Pneumosan. D/22
Dr. Hoff's Malt Extract. B/52	Rodogen. S/32
Knoll's Preparations. B/42	Tarzan Ointment. B/32
	Three-in-One Oils. P/21



## Observations and Reflections

By Xrayser III

### Pharmacists

in this realm continue to increase in number, nearly twenty thousand being now registered. Membership of the Pharmaceutical Society also increases, and there is no abatement in the host of the great unqualified—those who have been persuaded that pharmacy provides a satisfactory means of livelihood, yet have failed to satisfy the examiners when they presented themselves for the test of fitness. As the examination regulations increase in stringency, there are and will be more and more rejections, and many of those rejected will not again present themselves for examination. What becomes of all who have been trained in our business and fail to qualify? Some, we know, supply cheap labour to proprietors of pharmacies, and little exception can be taken to this so long as they are not permitted to assume the special functions which ought properly to be confined to duly qualified persons. Others again find that it pays to conduct business on their own account, leaving to the qualified all traffic in poisons. But what a pity it seems that, at a time when there appears to be a superabundance of duly qualified persons, circumstances should foster the accumulation of a mass of trained but legally unqualified material.

### Mr. Rowsell,

speaking at Cheltenham (*C. & D.*, February 6, p. 201), stated that too many are coming into pharmacy, and his further remarks appeared to imply that the "higher plane" of the examinations serve as a useful barrier to overcrowding of our ranks. But the trouble is that the barrier is not interposed at a sufficiently early stage. Possibly, the new apprenticeship arrangements, coupled with insistence upon passing an approved preliminary examination before apprenticeship begins, may do the trick, but the position is a sufficiently serious one to merit special consideration. In another report in the same issue (p. 187) I find Mr. Rowsell stating that "he was not content with the position of pharmacy in this country, and felt that one day pure pharmacy would be practised apart from the mere commercial side." But, if ever this comes to pass, outside of hospital and other dispensaries, there will be no room in pharmacy for several thousands of those now on the Register, who make their living out of something quite different. In still another report (p. 188), Mr. Rowsell is represented as saying that he considers the time is fast coming when the work of the doctor will be prescribing, and the chemist will do the dispensing. In view, however, of what so many of your correspondents write about, the cost and profits of Insurance dispensing, it is doubtful if the greatest possible increase in our dispensing work will help much towards a solution of the problem—what is to become of the apparent excess of both qualified and unqualified in our ranks.

### Canute

did not really think he could stem the flowing tide at the word of command, and the history books tell us that he adopted a very practical means of showing his courtiers the absurdity of their flattery. He gave the command, but the waves came on just the same. I imagine there will be a similar result, barring the wet feet perhaps, if the Bureau of the International Federation tries to check the flow of new medicinal preparations, as suggested in the secretary's letter (*C. & D.*, February 6, p. 198). The idea apparently is that manufacturers should, if possible, be precluded from supplying ready-made tablets, etc., which doctors order in prescriptions, and that pharmacists should be encouraged to prepare everything they dispense as in days of yore. There is a quaint savour about this proposal to put back the hands of the clock, and I wonder how many British pharmacists could honestly say that they would like to receive into stock only entire drugs and chemicals, which they would have to compound in the form that the prescribers order. I may add that the suggested "dangers of wholesale poisoning through an error of

manufacturing, or in the laboratory of a manufacturing house" does not make my flesh creep a bit, and I doubt if it will cause much perturbation of anyone's mind.

### A Notable Personality

has been removed by the death of Mr. W. F. Wells, whom it was my good fortune to meet on many occasions in former years. Earlier still I had grown accustomed to regard him as a doughty fighter, since reports of official proceedings in which he took part at that time revealed him as a formidable antagonist. I used to enjoy hearing Mr. Wells sing, and remember once asking him to favour with "The Wearing of the Green." But the idea seemed to trouble him, and in an undertone of great seriousness he informed me that it was a Fenian song! Times have changed greatly since then, but I shall always remember W. F. Wells as a charming friend and companion.

### Gerard's Herbal

is referred to frequently in the literature of pharmacy, and is from time to time under the notice of readers of *THE CHEMIST AND DRUGGIST* in the catalogues of second-hand booksellers, so it may be not uninteresting to note the values put upon copies by the booksellers. To-day I have received a well-known firm's catalogue in which a fine copy, in gilt-calf, but with repaired joints and the preliminary sheet B missing, is priced £25. Up to the year 1915 (say, ten years ago) I kept a record of the prices, in such catalogues, for each of the three editions. The one just mentioned is the first—1597—which is regarded as the most valuable to the collector. I find I have prices for ten copies of this edition. Two of these were defective, the best of them with the last leaf missing was valued at £6 10s. The other eight were complete and the prices ran as follows:—£6 (a fine complete copy), £10 10s. (Lord Ashbourne's copy), £12, £13, £15 15s., £18 15s., £20, £21. Of course there were differences in condition, but I think it may be granted that prices for this book, as for other books, have much appreciated since the war. One cause of the rise in values is undoubtedly the determination of the librarians of American Universities to secure all the books which are of historical value. Of the second edition, Johnson's (1633), which is the edition for students, I have records of nineteen copies, of which fourteen were complete, and the prices ranged from £3 10s. to £21. From £4 to £6 might be considered a fair one, but there were also copies at £10 10s., £12 and £15 15s. There are fewer copies noted of the third (1636) and last edition—namely, eleven; of these, eight were complete, and the prices were from £3 10s. to £14 14s.

### Elecampane

has a long record as a drug, its history reaching back to Hippocrates himself. It is probably held in less esteem to-day than ever before. It has found a place in most pharmacopœias, and all writers on physic have either described its virtues or included it in their formulas from time to time. Horace knew its value as a stomachic, as may be gathered from his reference to its use to stimulate the appetite of the surfeited glutton. Its presence in the *Campania* is said to account for the last two syllables of its name. To the Greeks it was known as *helenion*, and Gerard says this name was given to it because Helen "had her hands full of it when Paris stole her away into Phrygia." On the other hand, Schroeder, "the most Famous and Faithful Chymist," avers that it was so named because it "grew from the tears of Helena," in which statement he follows Pliny. The mediæval Latin name of *Enula campana* is the origin of our common English name, and the derivation of the *Enula* from the Greek *helenion* is generally accepted. The elecampane of this country was once highly esteemed, for William Coles ("The Art of Simpling," 1656) said that it was "one of the plants whereof England may boast as much as any, for there grows none better in the world than in England, let apothecaries and druggists say what they will." Parkinson ("Theatrum Botanicum") writes of the fresh roots being candied with sugar.



## Perfumery Chemicals

AROMATICS & SYNTHETICS

## Essential Oils

AND

TERPENELESS &amp; SESQUITERPENELESS OILS

Manufacturers and Distillers:

**A. BOAKE, ROBERTS & Co., Ltd.**  
 STRATFORD—LONDON—E.15

Telegrams: "Boake, Strat, London."  
 Telephone: Maryland 1050 (4 lines).

### PATENTS AND TRADE MARKS.

There are many worrying difficulties to be overcome in connection with the Registration of Trade Marks and the grant of Letters Patent which members of the Retail and Wholesale Drug Trade can avoid by consulting efficient agents who would undertake all the trouble for an inclusive fee and obtain protection in the United Kingdom and abroad. Advice in the first instance free. Pamphlets gratis.

**REGINALD W. BARKER & CO.**

56 Ludgate Hill, London, E.C.4.

## £150,000

SAVED TO OUR POLICY-HOLDERS IN REDUCED PREMIUMS.

Why not **BECOME ONE AND SAVE MONEY?**

Cover-all Shopkeeper's Policy a Special Feature  
 at One Policy, One Premium, One Renewal.

WRITE TO

## PROVINCIAL

INSURANCE COMPANY, LIMITED.

CHIEF OFFICES: { STRAMONGATE, KENDAL.  
 12 OLD JEWRY, E.C.2.

## FENNINGS' 50 YEARS' REPUTATION

## Children's Powders

ADVERTISED EVERYWHERE. READY SALES.  
**ALFRED FENNINGS, Cowes, I. W.**

## REYNOLDS & BRANSON, LTD.

Grand Prix **LEEDS.** Turin, 1911.

### PHARMACEUTICAL PREPARATIONS.

Tinctures, Ointments, Pills, Tablets, Suppositories,  
 Standardised and Clinically Tested Galenicals, &c.

### SURGICAL INSTRUMENTS.

X-Ray and Electro-Medical Apparatus, Dressings, &c.

### AERATED BEVERAGES.

Sparkling Phosphorated, Puritzer, Dry Ginger Ale, &c.

### SCIENTIFIC APPARATUS.

(Chemical, Physical and Photographic), Balances and Weights.  
**CHEMICALS FOR TECHNICAL AND ANALYTICAL PURPOSES.**

## FRENCH and all FOREIGN PROPRIETARY MEDICINES

Imported and Exported by

**WILCOX, JOZEAU & CO.**

(FOREIGN CHEMISTS LTD.)

15, Great St. Andrew St., London, W.C.2

Telephones: Gerrard 2521; Regent 4039

LIST ON APPLICATION  
 SPECIAL EXPORT TERMS

Dublin branch  
 19 TEMPLE BAR



## ROBINSON'S of CHESTERFIELD

for CARDBOARD BOXES  
 ROUND · OVAL · SQUARE · FOLDING

ROBINSON & SONS, LTD. • CHESTERFIELD & LONDON

## Finest Medicinal Non-freezing COD LIVER OIL

"ISCO" BRAND

ISAAC  
 SPENCER & CO.  
 (ABERDEEN) LTD.  
 ALBERT QUAY  
 ABERDEEN

Tel.: 3364, 3365 & 3368.

Telegrams: "Extractor, Aberdeen."

Samples and Quotations  
 sent on application.

EXTRA  
 RECTIFIED

## ALCOHOL FOR PERFUMERY

**J. BURROUGH, Ltd.**

1 Cale Distillery,  
 LAMBETH, S.E.11

## Editorial Articles

### Compiling a Pharmacopœia.—II

AN admission by a responsible medical authority of the predominating influence of pharmacy in pharmacopœial revision is contained in the "Lancet" for January 9, which states on page 82:—

The claim of the Pharmaceutical Society seems to us fair enough on general principles, for, as we have stated, bulk for bulk, a bigger share of the Pharmacopœia is pharmaceutical than medical. It must, however, be remembered that the General Medical Council works under the Act of 1858, and it appears to us that, if a change is to be made, it will depend on a change in the constitution of the Council rather than on any internal action of the Council itself. It would seem wiser, if a change is to be made, to take steps as soon as a new Pharmacopœia has been issued, rather than while one is in active preparation. The Locarno spirit will, at the present time, suit best these two branches of the art of healing, which have of recent years been working so well together.



The point at issue is evaded, because signs of "active preparation" for a critical revision of the British Pharmacopœia are lacking. Research and experimentation on pharmacopœial formulas has been sporadic for many years, all co-ordinated endeavours by pharmacists having been abandoned consequent upon the contemptuous recognition accorded by the General Medical Council to the services of the Committee of Reference in Pharmacy in connection with the compilation of the 1914 British Pharmacopœia. It would seem that the Pharmacopœia Committee of the General Medical Council will have to be guided by intuition as to what should be deleted, revised, and added to our next national formulary unless perchance they seek guidance from the U.S. Pharmacopœia. A precedent for such a procedure occurs in the identification tests for chemicals in the U.S.P., which are admittedly "patterned upon a chapter in the appendix of the British Pharmacopœia of 1914." Certainly the portents are not propitious for our next Pharmacopœia being representative of the advances made in the preparation and standardisation of medicines during the last decade. Professor A. J. Clark inveighs against the present deplorable situation in the "British Medical Journal" for January 2, wherein he states:—

The production of a new edition of the B.P. is so urgently needed that it will be necessary to produce a new volume as quickly as possible, and since most alterations in the Pharmacopœia involve a good deal of careful research work, it will probably be necessary to rely in the next edition very largely on information provided by other pharmacopœias. The expert knowledge available in England is, however, just as good as that in any other country, and it is offensive to national self-respect that we should be content with a parasitic existence and should not endeavour to supply our own quota of knowledge.

In future some organisation ought to be arranged that will ensure continuous research being carried out on pharmacopœial problems, and a new edition ought to be brought out at least every ten years.

Thus the attitude of omniscience and *laissez faire* adopted by the General Medical Council is condemned in both sections of the medical Press. Professor Clark is constructive in his criticism. He points out that success in the production of a pharmacopœia depends partly on a correct selection of the drugs to be included, and, secondly, on the provision of satisfactory standards for the drugs selected, but how this can be done without expert pharmaceutical assistance is not evident, because the basic factor in drug standardisation is drug identification. He suggests that the two chief principles in selecting drugs for inclusion in a pharmacopœia should be:—

(1) The inclusion of all powerful drugs in general use on the ground that variation in the activity of such drugs is a public danger; and

(2) The inclusion of a sufficient number of drugs to ensure that any medical man wishing to prescribe a drug to produce a particular therapeutic effect should be able to find a drug of the type desired in the pharmacopœia, and should be able to avoid the use of expensive proprietary articles.

Why trade-marked drugs should be dragged in is not obvious, for surely it is the medical practitioner's duty to know *what* he is prescribing. Dr. Clark favours deletion of 150 preparations from the present B.P., of which less than 10 are included in the U.S.P. X. He considers that about 80 drugs could be omitted without inconvenience in the next B.P., and that there are at least 40 important drugs in the present U.S.P. which should be added to our pharmacopœia. Professor Clark is not complimentary to the members of the Committee of the General Medical Council responsible for the editing of the British Pharmacopœia, since "it is only a chance if they happen to be particularly interested in the compila-

tion of a pharmacopœia." Neither does he spare the therapeutic knowledge of his medical *confrères* in his statement:—

Under the present arrangement the practitioner knows that the Pharmacopœia is prepared by the leaders of the medical profession, and he does not realise that in selecting drugs they are not guided by their own opinion as to the value of drugs, but merely follow popular custom. Hence the appearance of a drug or preparation in the Pharmacopœia encourages its use, and as its retention is determined simply by the frequency with which it is used, a vicious circle is established which checks the progress of therapeutics.

With regard to the standards formulated for drugs, the practitioner naturally believes that the standards for therapeutic efficiency are devised in accordance with the best scientific knowledge available and does not realise that faulty standards have been defended simply on the ground that the preparations made according to the standards have been accepted by the profession without complaint.

The above statement is undoubtedly far too sweeping, because the general medical practitioner possesses a "working" knowledge of the drugs used to remedy common ailments. However, pharmacists will agree with the opinion that the editors of the British Pharmacopœia "ought not to be afraid to take responsibility for saying that the drugs included have been selected because they are believed to produce therapeutic actions and that the preparations have been selected because they are believed to contain the active principles of the drugs in a staple and reliable form." It is added that "the assumption of such responsibility would, of course, be a departure from previous custom, but it would result in the production of a volume which would encourage rational therapeutics and would not be merely a record of obsolescent medical customs." It is obvious that the medical strictures on the methods of pharmacopœia compilation are far more severe than any that have emanated from pharmacists. The present situation is clearly untenable as regards public welfare, because the Pharmacopœia is behind the times both as a guide to medicine practice and as a legal standard. It behoves the General Medical Council to develop altruistic principles and devote the very handsome revenues from the sale of the work to carrying out the necessary researches which will bring the British Pharmacopœia up to date.

### The Decline in Shellac

THE substantial fall in the value of shellac during the past few weeks has been one of the outstanding features of the produce markets, the chief reasons for which were briefly referred to in our Trade Report of January 30. It would appear that advices reporting considerably increased crop yields in the chief producing districts brought about depression in Calcutta, and the downward movement was accelerated under the increased supplies coming forward. The latter factor has been prominent during the last few months, and in view of the successive marked additions made to the warehouse holdings in London, it is quite obvious that the market outlook has become considerably modified. Whether the piling up of stocks is merely ephemeral or not it is difficult to say, as statistical developments in the course of the last few years have been problematical and very erratic. However, the fairly substantially increased reserves, together with indications of continued ample shipments to this side, have disturbed market sentiment badly, but the fall may prove to be somewhat overdone in the face of an excellent consumption. It is suggested that shellac has already become relatively cheap, compared with the phenomenally high prices recorded between 1917 and 1924, but in any case it is most difficult to form an idea of its intrinsic value under present obscure conditions. The fact has to be noted that since the



close of 1925, when the price of TN orange on the spot stood at about 215s. per cwt., there has been, at the lowest figure touched last week of 160s., a decline representing 55s. per cwt. The fall in the Calcutta quotations over the same period was about 20 rupees down to 68 rupees, the bottom quotation cabled last week. The depreciation in the spot value was more or less in line with the cut made in c.i.f. rates for near shipment down to 142s. 6d., which created but little surprise, seeing that the stocks look like being increased further for the current month. There has been some talk on the part of influential parties closely identified with shellac that the fall has gone far enough, and that an upward tendency should be near at hand. There might be something in this theory, as Calcutta cables have latterly displayed a little more resistance to adverse surface appearances. The fact may be recalled that in 1917 the London stocks experienced a drop of more than 50 per cent. down to about 26,000 cases, and that the price by the end of that year advanced to about 360s. per cwt., this comparing with 145s. at the beginning of the same year. Although the stocks were then, therefore, about 12,000 cases larger than they are now, the price at that period was, as it will be seen below, also much higher, which was of course based on anticipation of a serious drain in subsequent years. Having regard to possibilities as to further additions that may be made to the stocks in the near future, it is as well to bear in mind that the world's consumption in more recent years has been decidedly progressive. This must, therefore, be regarded as an important factor in weighing the merits of the commodity, as good crop yields may easily be followed by poorer ones. There is also another point which is apt to be overlooked, and that is that out of the much heavier Calcutta shipments for last month, amounting to over 46,000 cwt., considerably more than one-half thereof was destined for the United States, or nearly 20,000 cwt. more than for the same month last year; on the other hand, this country's takings were considerably less than last year. The progress of consumption is all the better for the substantially reduced price ruling. In spite of a falling market in the course of the past year, the monthly average of the London deliveries was 4,831 cases, or only slightly less than for the previous year. We give below our usual tabulated returns for the last five years covering total landings and deliveries, and the extreme highest and lowest figures touched in each year for standard TN orange on the spot:—

Years	Landings cases	Deliveries cases	Spot value of T.N.	
			Highest	Lowest
1921 ..	52,463	53,409	410 0	272 6
1922 ..	50,452	57,225	395 0	285 0
1923 ..	67,474	56,404	375 0	255 0
1924 ..	53,059	58,593	335 0	255 0
1925 ..	59,023	57,978	315 0	210 0

The considerable shrinkage which took place in the London landings during 1924 was accompanied by another expansion in the deliveries, but the landings in the past year experienced a renewed considerable increase, although on the one hand deliveries within the last few months turned out quite good, so that the increase in the stocks on the year was only about 1,000 cases. Fluctuations in the stocks from year to year since 1915 are indicated below:—

1915 ..	93,709 cases	1921 ..	11,049 cases
1916 ..	54,112 "	1922 ..	4,276 "
1917 ..	26,052 "	1923 ..	15,336 "
1918 ..	26,858 "	1924 ..	9,802 "
1919 ..	14,641 "	1925 ..	10,847 "
1920 ..	12,223 "	1926 (January 31)	14,130 "

It is very probable that incoming supplies next month will fall to a moderate extent, so that the increase in the stocks looked for this month should be only temporary, and the statistical position here should become strengthened by the end of next month. While the takings from Calcutta direct by other foreign countries, besides the United States, have shown indication of a further steady expansion, our market can hardly be expected to be flooded with any very large additional supplies in excess of current trade needs at the considerably reduced price, even if, contrary to market expectations, production in India assumes still larger dimensions. However, the position is somewhat complex, and some time may yet elapse ere market possibilities can be approximately gauged, while it is quite possible that adverse features have already been discounted.

## Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

### Monday, February 15

*British Industries Fair*, White City, Shepherd's Bush, London, W.12. Closing date, February 25. Open daily 10 a.m. to 8 p.m. Simultaneously at Birmingham.

*Royal Society of Arts*, John Street, Adelphi, London, W.C., at 8 p.m. Cantor Lecture (I). Mr. G. W. C. Kay, D.Sc. (National Physical Laboratory), on "The Production and Measurement of High Vacuum."

### Tuesday, February 16

*Ealing Pharmacists' Association*, Eden's Restaurant, High Street, W.5, at 8.30 p.m. Mr. H. Skinner, Ph.C., on "Norway," (illustrated).

*Pharmaceutical Society of Great Britain (North Metropolitan Branch)*, North Library, Manor Gardens, N.7, at 8.30 p.m. Mr. Frank Browne on "The B.P. Codex."

*Royal Institution of Great Britain*, 21 Albemarle Street, London, W.1, at 5.15 p.m. Professor J. Barcroft begins a course of four lectures on "The Egg."

### Wednesday, February 17

*Croydon Pharmacists' Association*, Café Royal, North End. Annual dinner. Reception at 7 p.m. Tickets (Es. 6d. each) from Mr. H. Cooper Neve. Morning dress.

*Guild of Public Pharmacists*, 17 Bloomsbury Square, London, W.C., at 7.30 p.m. "A Review of my Correspondence," by the Secretary.

*Pharmaceutical Society of Great Britain*, 56 York Place, Edinburgh, at 8 p.m. Evening meeting. "An Examination of Commercial Tannic Acids by Comparative Methods," by Mr. W. B. Forbes, B.Sc., M.Sc.; notes on "Thyroid Extract and Potassium Permanganate," and "Belladonna Root" by Mr. J. J. Blackie, Ph.C.

*Pharmaceutical Society of Great Britain (Glasgow and S.W. Scottish Branch)*, McLellan Galleries (West Room), 270 Sauchiehall Street, at 7.30 p.m. Mr. J. P. Gilmour (editor of the "Pharmaceutical Journal") on "The Pharmacist and the Law."

### Thursday, February 18

*South-East London Chemists' Association*, Frascati Restaurant, 32 Oxford Street, W. Annual dinner and dance. Reception 6.30 p.m. Tickets (12s. 6d. each) from Mr. W. J. Turner, 16 Inchmery Road, Catford, S.E.6. Evening dress optional.

*Chemical Society*, Burlington House, London, W.1, at 8 p.m. "The Ultra-violet Spectrum of the Rare Earths, Neodymium, Praseodymium, Samarium, Europium, Erbium, and Others," by Mr. J. H. Gardiner.

*Sheffield Pharmaceutical and Chemical Society*—Social and dance.

**WEST HAM ASSOCIATION OF PHARMACISTS**.—The annual dinner and dance will be held at the Crown Room, Holborn Restaurant, London, W.C., on February 25. Tickets (12s. 6d. each) from Mr. J. Reed, 32 Church Street, West Ham, E.15.

**NEW HEALTH SOCIETY**.—An anonymous donor has presented the New Health Society with the sum of £4,000 for the purpose of establishing in London a central building and organisation to facilitate the activities of the movement. The object of the Society—which is under the presidency of Sir Arbuthnot Lane—is said to be "the teaching of the public in the simplest possible manner how to preserve the health of the community."



## Pharmaceutical Society of Great Britain

### Evening Meeting in London

THE fourth evening meeting of the winter session was held at 17 Bloomsbury Square, London, W.C., on February 9. The chair was occupied by Mr. P. F. Rowsell (President), supported by Mr. Edmund White and Mr. H. N. Linstead (Assistant Secretary), and among those present were Professor Greenish, Dr. David Hooper, Dr. Burn, of the Physiological Research Laboratory, W. Browne, H. Deane, W. B. Nelson, H. Finemore, Langford Moore, R. Fouracre, A. H. Jenkin, F. Browne, A. R. Melhuish. The President, in opening the proceedings, said he was pleased to see such a good gathering, for he was sure the paper would be of the greatest possible interest. Mr. Norman Evers, B.Sc., F.I.C., who had done a great deal of work in the chemistry and drugs, was a regular attendee at the science meetings and an exceedingly useful member. He would be remembered by many on account of the paper in collaboration with Mr. Gamble, read in 1922, on "Modern Ideas Respecting Acidity and Alkalinity." He would like to congratulate Mr. Evers on his recent work, "The Chemistry of Drugs," which was quickly being recognised as an extremely useful work of reference. He had much pleasure in calling upon Mr. Evers to give his paper on:—

#### The Deterioration of Drugs in the Pharmacy

By NORMAN EVERS, B.Sc., F.I.C.

##### [ABSTRACT]

When any change occurs in a drug the reason for which is not clear, it is the custom of many pharmacists to write to the wholesale house which supplies it, or even sometimes one which did not supply it, and ask for an explanation. The giving of the explanation usually falls on the chief chemist, who is supposed to be an omniscient being who can solve any problem which can possibly arise in the realm of chemistry or pharmacy. In this way one gets a fair experience of what happens to drugs during storage under various conditions, and I may say that the chemical problems involved are often intensely interesting, and well repay the time spent in their investigation. If I may attempt a definition of deterioration in drugs it is this—an alteration which affects either the medicinal value, the appearance, odour, or taste of a drug in such a way as to impair its value either as a therapeutic agent or as a saleable article. This leads one to divide deterioration in drugs into two classes, namely, changes which are apparent to the senses, such as change of appearance, odour, or taste, and changes which can only be detected by chemical methods. The latter group of changes go on without any indication that anything is occurring. Loss of an important active principle may occur, and the pharmacist may be unwittingly selling or using an article which is below the official standard in that respect. I propose to deal this evening with the chemical changes which occur in drugs and galenicals during storage and the best means of preventing these changes. Deterioration due to insects, moulds, and other forms of life I will leave on one side. Theoretically chemical change can always be prevented, and therefore it is theoretically possible to prevent all deterioration whatever. If a drug is kept sufficiently cold, out of contact with air or moisture, and in a hermetically sealed vessel, no change whatever will occur, and it will keep for ever. Unfortunately these conditions are not attainable in practice, and we have to compromise by storing drugs under the best conditions possible. Nevertheless, a knowledge of the type of change likely to occur will enable us to choose the best conditions for storage and to prevent avoidable losses in material and money. We cannot exclude air from a bottle which has to be frequently opened, but if it contains easily oxidisable material we need not close it with a badly fitting cork.

We will now consider the chief types of changes which are liable to occur. These are changes due to—(1) Oxidation; (2) loss of volatile constituents; (3) absorption of water; (4) absorption of carbon dioxide. These four types may be all set down to one cause—namely, ex-

posure to the atmosphere. In addition to these we have changes due to—(5) Hydrolysis; (6) change of reaction or hydrogen-ion concentration; (7) the action of light or heat; (8) catalytic decomposition; (9) crystallisation. Deterioration may, of course, be due to more than one of these causes acting together, and further an alteration due to one cause may render a substance more easily affected by a second cause. For instance, phenolic bodies are more susceptible to oxidation when the reaction is alkaline than when it is acid.

#### CHANGES DUE TO OXIDATION

The absorption of oxygen from the air is a frequent cause of trouble in pharmacy. A few examples of the most important changes due to oxidation will now be given.

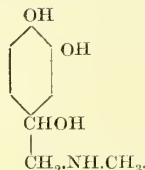
**Ferrous Compounds.**—The administration of iron in the form of ferrous salts is considered to have certain advantages over the use of the ferric compounds, and consequently we have several preparations in common use containing iron in a ferrous condition with other ingredients designed to preserve the iron from oxidation. The most common preservative is glucose as in *pil. ferri*, B.P., or *syr. ferri iodidi*, B.P. In the acid syrups such as *Easton's syrup* or *syr. ferri phosph. co.*, B.P.C., syrup only is used, but as will be seen later, when we deal with changes due to hydrolysis, inversion of the sugar into glucose and levulose proceeds rapidly on keeping, so that it is probable that the preservative action is due to the reducing nature of the glucose and levulose rather than to the sucrose, which, as you know, has no reducing action. In this connection it appears that it might be an advantage to prepare these syrups with invert sugar at the beginning, and so have the advantage of the action of the reducing sugars from the start. Hypophosphorous acid is also added in some cases, notably *liq. ferri iodidi fort.*, B.P.C., in order to prevent oxidation, and proves very effective. In spite of the addition of these reducing compounds to iron preparations, oxidation of ferrous salts is liable to occur if they are unduly exposed to the air. We are all familiar with the brown incrustation of ferric sulphate on ferrous sulphate crystals which have been kept for any length of time. Ferric phosphate is unfortunately less soluble in phosphoric acid than ferrous phosphate; consequently oxidation of the phosphate syrups results in the deposit of an unsightly precipitate. In *Easton's syrup* oxidation frequently produces a brown colouration. *Syr. ferri iodidi* develops a brown colour on exposure to the air owing to the formation of a ferric oxyiodide. This oxyiodide is said to be reduced again by sunlight to ferrous iodide. The addition of a small amount of hypophosphorous acid to this syrup effectually prevents oxidation.

**Ether.**—Ethyl ether, after exposure to light and air, acquires a strong oxidising action, due to the formation of peroxides, to which the formulae  $C_2H_5O.CH(CH_3).O.OH$  and  $CH_3.CHOH.O.O.CHOH.CH_3$  have been ascribed. These peroxides are the cause of undesirable after-effects when the ether is used as an anæsthetic. Middleton ("Y.-B.P." 1924, 615) has shown that the most important condition of storage is the exclusion of light, and that the amount of air in the bottle has little effect. If carefully purified at the start and stored in amber glass bottles, little oxidation occurs, but the addition of 0.01 per cent. of pyrogallol has a powerful deterrent effect on the decomposition.

**Phenols.**—Nearly all phenolic bodies are susceptible to oxidation, and especially so when the reaction is alkaline. Phenol itself is liable to become pink on exposure to air. Pyrogallol, while stable in crystalline form, rapidly absorbs oxygen in alkaline solution with the production of a brown colour. Similar changes occur in the amino-phenols which are used as photographic developers, such as amidol. Salicylic acid, which has a phenol group, is quite stable in the form of acid, and sodium salicylate is stable in solution provided that the reaction is not alkaline. If the latter is the case, oxidation occurs with the formation of a brown compound. For this reason commercial sodium salicylate always contains a slight excess of salicylic acid over and above that required to neutralise the sodium. The slight excess of acid makes it possible to keep solutions of sodium salicylate for a considerable time without alteration.



Adrenalin, which is *l*-methylamino ethanol catechol, contains two phenolic hydroxyl groups. Adrenalin solutions become pink on exposure to air, and the change is



more rapid in neutral or alkaline solutions, than in acid solutions.

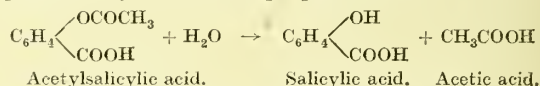
**Vitamins.**—Of the three vitamins of special importance in medicine, the growth-producing vitamin A, the anti-rachitic vitamin D, and the anti-scorbutic vitamin C all are extremely sensitive to oxidation. Cod-liver oil may lose a considerable proportion of its original vitamin A value in storage under conditions that permit oxidative changes. On the other hand, if properly stored out of contact with air, it may retain its activity for a considerable period. The bottle of oil shown has been stored for twenty years in a corked bottle with a lead cap, and still gives a colour reaction for vitamin A as strong as some fresh oils. In the form of emulsion with malt extract or other emulsifying agents, cod-liver oil retains its vitamin value for considerable periods. Since oxidation is the chief factor concerned in the inactivation of cod-liver oil and products containing that oil, it should, as far as possible, be stored with minimum exposure to air at as low a temperature as possible and in the dark. Oxidation of cod-liver oil is accompanied by the development of an objectionable taste and smell in the oil. Vitamin C is equally sensitive to oxidation. The concentrated preparation from lemon juice may be stored in acid solution *in vacuo* for some months without loss of activity, but with access of air it loses its potency.

Both *Salvarsan* or arsenobenzol and *Neosalvarsan* or novarsenobenzol are unstable in the presence of air, and in solution are rapidly oxidised with the formation of a yellow to reddish tinge and an increase in the toxicity. The powder is, therefore, stored in sealed tubes, and the solution is made immediately before use. Solutions may be kept under nitrogen gas in an ice-box for some months without change, but even in the presence of nitrogen a change occurs at room temperature.

**Aldehydes.**—A class of readily oxidisable compounds which will occur to the mind is the aldehydes. Of these the most important in pharmacy are formaldehyde, benzaldehyde, and cinnamic aldehyde. Formaldehyde in solution is slowly converted into formic acid  $\text{H}\cdot\text{CHO} + \text{O} = \text{HCOOH}$ . The more important change that occurs in formaldehyde solutions is polymerisation with the formation of paraformaldehyde, which is slowly thrown out of solution. Polymerisation is retarded by retaining some methyl alcohol in the product. Benzaldehyde is slowly oxidised to benzoic acid, and crystals of the latter may sometimes be seen at the bottom of old specimens or in essential oil of almonds. The same change goes on in cherry laurel water, which contains benzaldehyde. This change may cause trouble by inducing irritating properties if the water is used in eye-lotions. Cinnamic aldehyde is, as you know, the chief constituent of the essential oils of cinnamon and cassia. Oxidation to cinnamic acid may take place in the oil itself, and is particularly liable to occur in cinnamon water. The cinnamic acid may even form crystals in the water. A further decomposition may occur if the solution becomes mouldy, with the formation of cinnamene and styrene, which gives a benzene-like odour to the cinnamon water. Coumarin may also be formed by conversion of cinnamic acid into *o*-hydroxy cinnamic acid, which by losing a molecule of water forms coumarin.

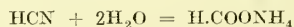
**Hydrolysis.**—Under this heading we include all changes due to chemical reactions brought about by the addition of water. The hydrolysis may be, as in the case of acetylsalicylic, a straightforward chemical reaction, or it may be induced by the action of enzymes, as in the destruction of digitalis glucosides. The process of hydrolysis, particularly where the action of enzymes is concerned, is greatly affected by the reaction of hydrogen

ion concentration of the solution—e.g., the inversion which goes on in acid solutions of cane sugar, but not in neutral solutions, and the hydrolysing action of trypsin, which is only exerted in alkaline solutions. Acetylsalicylic acid affords a simple example of decomposition due to hydrolysis. The action of water is represented by the following equation:—



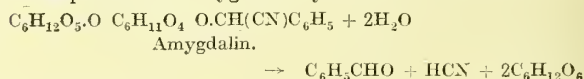
Acetylsalicylic acid will, if kept dry, remain in good condition for a considerable time, but if allowed to become damp or if heated readily decomposes. When suspended in water the hydrolysis proceeds rapidly, and even more rapidly in solutions of the salts. For this reason all methods of administering acetylsalicylic acid in solution, such as dispensing with sodium citrate, are valueless unless the solution is given immediately after preparation, since after a short time the solution will consist of a mixture of salicylate and acetate. The presence of decomposition in acetylsalicylic acid can be readily detected by the odour of acetic acid which develops, by the ferric chloride test for salicylic acid, or by the melting-point, which is lowered.

**Hydrocyanic Acid.**—Aqueous solutions of hydrocyanic acid decompose slowly on standing, with the production of ammonium formate and a brown substance,



The brown substance is possibly a polymer of the formula  $\text{H}_2\text{N}\cdot\text{CH}(\text{CN})_2$ . The decomposition is said to be retarded by the addition of a small amount of hydrochloric acid; it is accelerated by light and by traces of alkali. Hydrocyanic acid is therefore best kept in amber-coloured bottles of neutral glass in a cool dark place. The loss is much reduced by keeping in paraffin-coated bottles. Hydrocyanic acid may also be lost from solutions owing to its volatility. It should therefore be kept well stoppered.

**Glucosides.**—Generally glucosides are fairly stable compounds, but they are readily attacked by certain enzymes, which usually occur in the same plant. The action of the enzyme is one of hydrolysis, as in the case of the decomposition of amygdalin by emulsin.



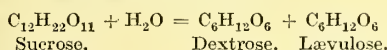
If, therefore, the enzyme is not destroyed in the drug, hydrolysis of glucosides may occur. A notable instance of this is seen in digitalis leaves; hydrolysis of the glucosides proceeds unless the leaves are carefully dried and kept in a dry atmosphere. It has been shown that digitalis stored in stoppered glass bottles, kept in a dark place, and containing not more than 1.5 per cent. of moisture, will lose little of its potency even after two or three years. On the other hand, with a moisture content of 5.6 per cent., the potency decreased in eight months by 27 per cent., and with 10 per cent. of moisture by over 35 per cent. The same decomposition proceeds in tincture of digitalis, which slowly loses its potency on storage. It has been suggested that the leaves should be treated with boiling alcohol in the preparation of the tincture in order to destroy the enzyme, but this does not appear to have met with approval. The preparation of the tincture with stronger alcohol has no advantage, since, although the enzyme may not be soluble, the glucosides are not thoroughly extracted. Very little loss in strength occurs in the tincture for a period of nine months after manufacture, but thereafter deterioration is more marked. The infusion of digitalis loses its strength much more rapidly, and should not be used after three or four days. Tincture of squill shows a similar loss of potency, but it retains some degree of activity for a longer period than digitalis. Strophanthus glucosides are remarkably stable, and the tincture does not lose potency for many years.

**Alkaloids.**—Certain alkaloids, particularly those which are readily hydrolysed, are slowly decomposed on keeping in the form of galenicals, with the result that the



preparations become below standard. Among the preparations specially liable to diminution in strength are those of coca, conium, colchicum, ipecacuanha, sanguinaria, and veratrum. Among the most stable are preparations of nux vomica, aconite, belladonna, hyoscyamus, stramonium, opium, and gelsemium. It is desirable that preparations of the former drugs should not be kept longer than two years from the time of manufacture. There has been much discussion recently on the question as to whether a reduction in the morphine content of opium occurs on keeping. On the whole the evidence appears to favour the view that little or no loss takes place. Ipecacuanha preparations probably show a slow loss of alkaloid, but here again the evidence is somewhat contradictory. The solanaceous alkaloids are remarkably stable in their preparations. This is somewhat unexpected, as the alkaloids are readily hydrolysed. I do not know of any evidence which indicates whether racemisation of *l*-hyoscyamine goes on in preparations of the drug. It is known that atropine (the optically inactive form of hyoscyamine) does not occur in the fresh drug, but is only formed in the process of extraction of the alkaloids. It is therefore extremely probable that this process continues in the preparations.

*The Hydrolysis of Sucrose in Syrups.*—Sucrose in acid solutions is slowly hydrolysed or "inverted" with the formation of dextrose and levulose.



This reaction goes on even in strong syrups in which acid is present, such as Easton's syrup or syr. ferri phosph. co. In these syrups where the sugar concentration is high, the removal of water by the inversion of the sugar causes a contraction of volume with a resulting increase in specific gravity. This inversion may go on so far that crystals of dextrose may actually separate. On the other hand, the abstraction of water may cause quinine acid phosphate to crystallise from the syrup. The crystallisation of the latter salt is a fairly common occurrence in Easton's syrup. The crystals form fine needles which give a silky appearance to the syrup when it is shaken. Easton's syrup when properly made is very nearly saturated with regard to quinine acid phosphate. It requires very little disturbance of the conditions, such as the use of a little too much sugar or the abstraction of water by the inversion of the sugar, to cause the syrup to become supersaturated with respect to quinine acid phosphate. The syrup may remain supersaturated for some time, but once crystallisation begins it proceeds rapidly, and the whole liquid may become an almost solid mass of crystals. The crystals may readily be redissolved by warming. It is clear that in products such as the iron phosphate syrups which are in a condition of chemical instability, it is absolutely essential that the greatest care should be exercised, not only in their manufacture, but in seeing that they are stored under conditions which will retard these changes as far as possible. Storage in a cool place and the least possible exposure to air is the best means of effecting this.

#### CHANGES DUE TO LOSS OF VOLATILE CONSTITUENTS

This is one of the most important, if not the most important, causes of deterioration in drugs. Unfortunately, it is not always easy to prevent it. When a bottle containing such a volatile substance as ethyl nitrite has to be frequently opened, it is practically impossible to avoid loss of strength. The only thing to do is not to keep it in too large bottles, and to keep it really well stoppered when not in use.

*Spt. Ether. Nit.*—At one time spt. ether. nit. was a favourite with the Food and Drugs Act authorities, but nowadays it is rare to see a prosecution for this preparation. This is partly due to the fact that the standard of the B.P. 1914 is lower than that of the B.P. 1898, and allows for some loss of strength. It has been shown that the loss is almost entirely due to volatilisation, and that 3 per cent. of the activity may be lost even in pouring from one bottle to another. Liq. ethyl nit., B.P., is rather more stable than spt. ether. nit. The presence of glycerin seems to have some preservative action. Both preparations should be stored in amber bottles, since light

is said to cause decomposition of the ethyl nitrite. Excess of acid in the preparation may also cause rapid hydrolysis of ethyl nitrite. It has been suggested that the addition of magnesium carbonate prevents the production of excess of acid and preserves the strength. The magnesium carbonate is filtered off when the spirit is required for use. The addition of a small amount of sodium sulphite is also said to act as a preservative, but the adoption of such means of preservation, of course, produces an article which is not strictly B.P. However well spt. ether. nit. may be kept up to strength by care in storage, it is certain that it does not keep in mixture form, and the use of concentrated mixtures containing it is to be condemned. Recently I had occasion to examine a number of concentrated mixtures, and although they had been recently prepared, the amount of spt. ether. nit. found was, on the average, about one-sixth of the amount added.

*Amyl nitrite* glass capsules have been sometimes found to explode, but this does not occur unless water is present in the capsules.

*Lin. Camphorae.*—Contrary to many statements which have been made, camphorated oil does not lose in strength on keeping under ordinary conditions.

*Loss of Ammonia.*—Preparations such as tinct. quinin. ammon. and other ammoniated tinctures, in fact, all preparations containing free ammonia, are liable to losses due to the volatile nature of the ammonia. Messrs. Self and Corfield ("Pharm. Journ.," Feb. 6, 1925, 134) have shown that powdered ammonium carbonate is liable to lose ammonia, and that the practice of keeping a solution of 1 in 8 strength is much less liable to errors on account of diminution in strength. This solution is perfectly stable when kept in stoppered bottles at ordinary temperatures, even when dispensed at frequent intervals. It was also shown that mixtures containing ammonium carbonate, when preserved for a month in ordinary corked bottles, showed not more than 2 per cent. loss.

*Ointments.*—Ointments containing volatile constituents such as phenol ointment are liable to lose part of their potency on storage under ordinary conditions. Since there are no official standards for these ointments—that is to say, a manufacturing formula is given by the B.P., but no standard for the finished ointment—and as considerable loss of volatile matter takes place in the course of manufacture, the comparatively slight losses that occur on keeping are not of great importance. The phenol in phenol ointment may crystallise if the ointment is subjected to great cold.

In the case of iodine ointment, loss of free iodine proceeds not so much from volatilisation as from combination with the ointment base. About 30 per cent. of the iodine added is absorbed during manufacture, and a further 5 per cent. goes into combination during the first month of storage. After that time it is a relatively stable preparation.

*Formaldehyde Tablets.*—Considerable losses of formaldehyde may occur in these tablets on keeping, and they should preferably be stored in airtight containers. It has been suggested that the use of paraformaldehyde in place of formaldehyde would prevent this loss, but there is some doubt as to whether this would be equally effective.

*Efflorescence.*—The loss of water from crystalline salts may be regarded as falling under the heading of loss of volatile constituents. When a hydrated salt such as sodium sulphate is placed in a perfectly dry atmosphere, it gradually loses water, and therefore exerts a vapour pressure. If the vapour pressure of a hydrate is greater than the vapour pressure of water vapour in the atmosphere, the salt will lose water—i.e., will effloresce. This is the case, for example, with common washing soda,  $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$ , which, when exposed to the air, loses water with the production of a lower hydrate. The vapour pressure of a hydrate increases rapidly with temperature. Thus, ordinary sodium phosphate,  $\text{Na}_2\text{HPO}_4 \cdot 12\text{H}_2\text{O}$ , though stable under ordinary conditions, has a vapour pressure at 25° C. of over 18 mm., which is greater than the average pressure of aqueous vapour in the atmosphere. The salt will therefore effloresce at 25° C. Sodium sulphate shows very similar behaviour, and effloresces rapidly in a warm, dry atmosphere. Efflorescence assumes a practical significance in the case of bath salts. These crystals are hydrated sodium carbonate, and unless carefully kept in a cool place are likely to



effloresce and lose their pristine beauty. It will be seen from these remarks why it is unwise to put bottles of bath salts in a shop window in full sunlight on a hot summer's day. In America sodium thiosulphate is often used for bath salts because it does not effloresce, and forms crystals of attractive shape.

#### DETERIORATION DUE TO ABSORPTION OF WATER AND CARBON DIOXIDE

While on the subject of efflorescence we may aptly consider the reverse process—deliquescence. Deliquescence is the absorption of water from the atmosphere by a crystalline salt. All deliquescent salts are very soluble in water, and this suggests an explanation of the change. A little saturated solution is formed by a trace of moisture condensed on the surface of the solid. The vapour pressure of this is less than the pressure of aqueous vapour in the atmosphere. Moisture is attracted by the salt, which gradually liquefies to a saturated solution, goes on absorbing moisture until its dilution is such that the vapour pressure is equal to the partial pressure of water in the atmosphere. Solids which attract water without liquefaction and liquids, such as alcohol and sulphuric acid, are said to be hygroscopic. Examples of deliquescent salts are potassium carbonate, calcium chloride, sodium iodide, and mercuric potassium iodide. The case of calcined magnesia is interesting. The B.P. requires that this compound shall lose not more than 1 per cent. of its weight when heated to dull redness. This is a standard which is readily attained when the magnesia is made, and the heavy variety can be kept up to this standard under ordinary conditions of storage with little trouble. The light variety, however, is very much more hygroscopic, and it is probable that the standard of 1 per cent. is rather too severe. In order that the loss on heating may not exceed 1 per cent., light magnesia must be very carefully stored in well-stoppered bottles, and should not be allowed to lie about exposed to the air, as is often done. Carbon dioxide is absorbed by magnesia as well as water. This absorption goes on in pulv. rhei co., and this preparation should also be stored in airtight containers. Other examples of difficulties due to the hygroscopic nature of materials are the absorption of moisture by sugar in the form of lozenges, pastilles, etc., causing them to become soft or to stick together.

#### CHANGE OF REACTION OR HYDROGEN ION CONCENTRATION

Change of hydrogen ion concentration is chiefly to be considered as a cause predisposing to other changes, such as hydrolysis or oxidation. I have already mentioned the development of acidity in spt. æther. nit. as a cause of hydrolysis of ethyl nitrite.

**Pepsin.**—Pepsin in acid solutions will retain its activity for considerable periods, but even in slightly alkaline solutions it rapidly diminishes in potency. Preparations such as elixir bismuth. et pepsin. co. are therefore based on unsound chemical knowledge, since the presence of liq. bismuth. causes them to be slightly alkaline, and, in fact, the pepsin after a short time is found to be a negative quantity. Changes in reaction are often caused by the use of alkaline glass bottles or containers, and preparations which are sensitive to alkali should always be stored in bottles or ampoules of neutral glass. This is particularly important when the solution is to be sterilised, since much more alkali is extracted from the glass when heated. Solutions of cocaine, novocain and other local anaesthetics are readily decomposed by sterilisation in ampoules of alkaline glass. Changes of this nature may be often prevented by the addition of "buffer" solutions. Solutions of salts such as phosphates, borates, citrates, etc., have the property of resisting slight changes in hydrogen ion concentration. Probably the use of this device might be profitably extended in pharmacy. An instance where it has been employed is found in Dakin's solution, where the addition of boric acid to the solution of sodium hypochlorite prevents the development of acidity in the solution and the resulting decomposition of the hypochlorite.

**Insulin.**—Insulin and other active hormones are peculiarly sensitive to the reaction of the solution, and must be kept in bottles of glass which is absolutely neutral. Insulin is prepared in a solution which is slightly acid at a Ph of about 3.5. In this condition insulin will keep for long periods, especially if kept in cold storage.

The introduction of a trace of alkali either from the glass or from a hypodermic needle which has been sterilised in lysol, which is alkaline, or even in alkaline tap water, may cause the insulin to become cloudy when the Ph has been changed to about 4.5. In this condition the insulin is still active, but it retains its activity for a much shorter period than at a Ph of 3.5. If more alkali is added the insulin redissolves and rapidly loses its potency.

**Pituitary Extract** shows a similar behaviour, and retains its potency best at a Ph of about 3.5. I have already mentioned the sensitiveness of adrenalin and other phenols to oxidation in alkaline solutions.

#### ACTION OF LIGHT AND HEAT

All chemical changes proceed more rapidly if the temperature is raised, and many chemical changes are accelerated by the action of light. Several reactions of the latter class have already been mentioned, and it is hardly necessary to mention that nearly all types of deterioration can be retarded by storage in a cool place. Provision of cold storage has been found a necessity by many wholesale houses with the extension of the use of animal products, serums and vaccines, and it is probable that in the future the retailer may also come to look upon it as indispensable. Exposure to cold may, however, induce crystallisation, essential oils may deposit crystalline constituents, or fixed oils may deposit "stearine." Cod-liver oil and liquid paraffin are both refined by filtration at a low temperature, so that no cloudiness should appear in these if not cooled below the freezing-point of water.

#### CATALYTIC DECOMPOSITION

The classic example of this type of change in hydrogen peroxide. Alkaline glass or stone bottles upset its stability. It keeps best when of the highest purity with a trace of acid, and a trace of some preservative, such as acetanilide or quinine. Decomposition is hastened by the presence of the merest trace of certain substances, particularly of certain metals.

**Castor Oil.**—Castor oil becomes darker in colour and increases in acidity on keeping. The darkening in colour appears to be accelerated under certain conditions. A few days ago I saw a tray of white glass bottles of castor oil which had all been filled from the same tank six weeks previously, and had been kept in a fairly dark room since. Whereas the large majority were of the usual pale yellow colour, the oil in certain bottles had become very much darker in colour. On the face of it, it appeared that the only possible cause of the darkening was either some impurity left in the bottles or the glass of the bottles themselves. On pouring out the oil it was seen that the glass of the bottles containing the darkened oil was of a different colour to that of the other bottles. Evidently something in the glass of the bottles must have accelerated the change, probably by acting as a catalyst. I have not yet had time to carry the investigation further, but this is a good example of the unexpected things that happen in pharmacy, and of the interesting problems which it is continually providing. The dark colour formed in the oil may be again bleached by exposure to sunlight. The increase in acid value of castor oil, which is probably induced by bacteria, or an enzyme, may be so great that in a few months a good oil may no longer be within the B.P. limits for acidity.

#### CRYSTALLISATION

Crystallisation in Easton's syrup has already been mentioned. There is one other instance which may be touched on, the crystallisation of maltose from malt extract or malt and oil. Sometimes crystals appear in tufts on the side of the jar and slowly grow until the whole of the contents is a solid mass. If the malt extract has been properly made, this should not occur within a reasonable time, but particularly if the diastatic value is high, it may occur after a few years. As would be expected, crystallisation is hastened by storage at a low temperature.

From what has been said, it appears that the requirements for the storage of drugs which are likely to deteriorate are comparatively simple. A minimum of exposure to air, well-stoppered bottles, a low temperature, and protection from light, are the ideals to be aimed at in nearly all the cases I have mentioned.



## DISCUSSION

The CHAIRMAN said they had listened with very great interest to Mr. Evers' paper, and without saying more he would open the discussion.

Dr. DAVID HOOPER said he thought that the rate of deterioration of a drug depended on the part of the plant from which it was derived. Cinchona bark, for example, is a very stable drug. He had compared a sample over fifty years old with cinchona specially grown on the plantations, and found them of equal activity. Even a damp powdered bark with fungoid growth on the surface was active, and bark recovered from a wreck on analysis was found to be a good commercial bark. Leaves, on the other hand, are unstable. He referred to gambier. He had extracted gambier leaves brought from Singapore, and could not obtain any catechin. He noted that the author had not mentioned kino, which, he regretted, has gone almost out of use, although it is one of the best astringents known. The Malabar variety is the most satisfactory. Charas, another drug which the author had omitted, is very unstable. At one year old it has lost much of its activity, and after three years is only fit to be burnt.

Mr. FINNEMORE, speaking of the difference in activity and stability of digitalis and strophanthus, said Mr. Evers had suggested there is no enzyme in strophanthus. He (Mr. Finnemore) thought this unlikely. There would probably be no glucoside without an enzyme. In Easton's syrup he would have thought the absence of water could account for the concentration and consequent crystallisation of the sugar. The molecular weight of sugar is 342, while that of water is only 18. There was, for a student, the subject of a short paper in the instability of benzaldehyde. Alcohol in small quantities is supposed to preserve it, but in large quantities to have no effect. The action of other retarding agents might be looked into. Cinnamic aldehyde is probably preserved by the other constituents present in the oil. He was interested in the application of pyrogallol as a preservative in ether. It had been tried in the case of Indian turpentine, which contains not pinene but carene, which is unstable. Consequently, although the Indian oil is inferior to American, pyrogallol might add to its usefulness.

Mr. FOURACRE asked if, seeing that the use of spt. aeth. nit. was condemned in concentrated mixture, is it not equally subject to deterioration in a diluted mixture?

Mr. MELHUSH expressed his gratitude for the paper, which was apposite to the time it was given. He referred to the testing of prescriptions scheme now in force throughout the country. He suggested that the papers be published in the analytical Press as well as the pharmaceutical Press, so that their analytical friends might see what they are up against.

Mr. EDMUND WHITE said many years ago spt. aeth. nit. was a favourite substance with the analyst. He thought that it should be taken like old brandy—without water, and drink it quickly. (Laughter.) More nonsense had been talked about ether than anything else. The impurities simply did not count. He believed it had been stated that pure ether had no action. Certainly the search for pure ether was of no benefit to the patient. With regard to the difficulties in keeping kino, he would like to remind them that this is not due to simple oxidation, but to enzymic action, the same as in the case of digitalis and strophanthus. The stability of such drugs depends on the ferments being destroyed.

Mr. LANGFORD MOORE drew attention to a case in which a museum specimen of paraldehyde, many years old, was found to have improved in its effectiveness rather than deteriorated.

Mr. EVERS, in replying to questions, said Mr. White had explained the reason of impaired activity in kino. In strophanthus it is possible that there would be no active enzyme in a resting seed. It is different in the leaf. It had been proved that the inversion of sugar causes contraction in volume and increase in gravity. The decomposition of spt. aeth. nit. takes place equally in dilute as in concentrated mixtures. With regard to ether, the chief trouble appeared to be that anaesthetists do not know what they want. Mr. Rowsell then conveyed the thanks of the meeting to Mr. Evers.

## Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

## ENGLAND AND WALES

## Local Reports

**Liverpool.**—The Insurance Committee, on February 5, passed a resolution supporting the National Association of Insurance Committees in their stand against the proposed transfer of the powers and duties of insurance committees to the councils of counties and county boroughs. Dr. Wafer Byrne made a protest against hypodermic syringes and needles for self-administration of insulin having been supplied to three patients. "This is a dangerous drug," said Dr. Wafer Byrne, "and I am amazed that self-administration should be allowed. An over-dose of this drug might have serious consequences."

## January Drug Tariff

The following are the alterations for January in the Insurance Drug Tariff for England and Wales:—

**Lower.**—Acid. carbolic, 1s. 5d. lb.; acid. carbolic, liq., 1s. 3d. lb.; acid. tartaric, pulv., 1s. 6d. lb.; ammon. brom., 3s. 8d. lb.; caffeine, 1s. 6d. oz.; caffeine, cit., 1s. oz.; calc. chlorid., 1s. 4d. lb.; calc. lact., 3s. lb.; ext. casc. sagr. liq., 3s. 2d. lb.; ext. opii liq., 7s. lb.; menthol, 4s. oz.; paraff. liq., 1s. 5d. lb.; paraff. mol. flav., 9d. lb.; resorcinum, 7d. oz.; spt. ammon. fetid., 7s. 6d. lb.; sulphonal, 1s. 10d. oz.; ung. gallæ c. opio, 6s. 6d. lb.; ung. methyl. salicyl. co. dil., 5s. 3d. lb. Bandages: crêpe, 2 in., 7.7d., 2½ in., 9.8d., 3 in., 11.5d.; open-wove, 1 in. x 3 yds., 6d., 2 in. x 4 yds., 1.4d., 4 in. x 6 yds., 4.0d., 6 in. x 6 yds., 5.9d. Cotton wool, unmedicated, 8 oz., 12.3d. Gauzes: double cyanide, ½ of sq. yd., 1.4d.; unmedicated, 1 sq. yd., 2.3d., 3 sq. yds., 6.2d., 6 sq. yds., 11.8d. Ice bags: rubber, 121.5d.; check, 24.5d. Lints: boric, 1 lb., 23.0d.; unmedicated, 6 oz., 12.3d., 3 oz., 16.4d., 1 lb., 31.0d. Tows: carbolised, 8 oz., 5.0d.; unmedicated, 8 oz., 3.6d.

**Higher.**—Aq. menth. pip. conc., 17s. lb.; emp. belladon., 7.4d. sq. ft.; emp. cantharidin, 25.1d. sq. ft.; emp. plumbi, 4.8d. sq. ft.; emp. resinae, 4.8d. sq. ft.; emp. roborans, 5.5d. sq. ft.; emp. saponis, 5.5d. sq. ft.; ext. ergot. liq., 8s. 6d. lb.; ext. ipecac. liq., 2s. 2d. oz.; glycerinum, 1s. 9d. lb.; inf. scoparii conc., 2s. 10d. lb.; ol. caryoph., 11s. 6d. lb.; ol. limonis, 10s. 3d. lb.; ol. menth. pip., 140s. lb.; spt. menth. pip., 38s. lb.; spt. rectificatus, 21s. 8d. pint. Oiled silk, 5.1d. sq. ft.

## Retail Pharmacists' Union

The following time-table has been arranged for the biennial election of the Executive Committee of the Retail Pharmacists' Union: Nominations receivable up to February 26, voting papers issued on March 8, voting papers returnable March 18; result declared at annual meeting, March 24.

There are three members to be elected for each of the six following electoral divisions:—

1.—**Metropolitan.**—London, Middlesex, Surrey, West Ham and Walthamstow.

2.—**West.**—Wales, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

3.—**South.**—Berkshire, Cornwall, Devon, Dorset, Gloucestershire, Hants, Kent, Somerset, Sussex and Wiltshire.

4.—**North-East.**—Durham, Northumberland and Yorkshire.

5.—**North-West.**—Cheshire, Cumberland, Lancashire and Westmorland.

6.—**Central.**—Bedfordshire, Buckinghamshire, Cambridgeshire, Derbyshire, Essex (except West Ham and Walthamstow), Hertfordshire, Huntingdonshire, Leicestershire, Lancs., Norfolk, Northamptonshire, Nottinghamshire, Oxfordshire, Rutland and Suffolk.

Nominations for election to the Executive Committee must be signed by a member of the Union and must be countersigned by the candidate, as his consent to allow his name to go forward for election is necessary before the nomination can be accepted.

**JAMAICA GINGER.**—The exports from Jamaica during 1925 amounted to 23,231 cwt., against 13,784 cwt. in 1924.



## German Foreign Trade

COMPARED with the preceding year, Germany's foreign trade during 1925 shows a considerable expansion in exports as well as in imports, the latter continuing to be appreciably in excess of the former. The total exports of goods figure with 8,798,419,000 marks, against a value of 6,548,464,000 marks in 1924, while imports aggregated 12,428,149,000 marks, compared with 9,108,798,000 marks in 1924. A very substantial increase is registered in the total exports of chemical and pharmaceutical products, dyes and colours, which rose from 2,442,087 tons, valued at 580,544,000 marks, in 1924, to 3,738,554 tons, valued at 897,723,000 marks, in 1925. Imports of goods belonging to this category also show an increase: 1924=793,100 tons, value 144,767,000 marks; 1925=1,130,069 tons, value 210,573,000 marks. In consequence of the modifications introduced in October 1925 in the German customs tariff, a number of changes have been made in the statistical classification, with the result that certain groups have been divided, and figures are now available for each of the products formerly classed under a general heading. Where this has taken place, specific figures are, naturally, only available for the last three months of 1925, and in the table below these are distinguished by the addition of an asterisk. In the German official statistics the country of origin, or of destination, is given whenever exports or imports represented a value of at least 150,000 marks during the whole of 1924, or at least 25,000 marks during the two months of November and December 1924. With regard to the new headings, countries of origin, or destination, are given where the value of the imports, or exports, amounted to at least 13,000 marks. In the following table we give the amounts, in kilos, of Germany's imports and exports of those goods of special interest to our readers, particularly with the British Empire, for 1925 and 1924, based on the official classification and figures issued by the statistical department of the German Reich.

	Imports		Exports	
	1924	1925	1924	1925
	Kilos	Kilos	Kilos	Kilos
Acetaldehyde; paraldehyde ..	200	55,100	35,000	43,500
Acetic acid ..	900	—	5,478,300	5,815,900
Great Britain ..	—	—	1,207,800	1,557,300
Brit. India ..	—	—	415,000	124,500
Malacca ..	—	—	264,900	111,100
Acetone; formaldehyde solution; methanol, refined ..	105,900	7,200	4,207,100	8,902,100
Great Britain ..	—	—	1,200,500	2,107,500
Alkaloids and their salts, not otherwise enumerated; theobromine ..	—	5,805	—	15,219
Brit. India ..	—	—	—	949
Canada ..	—	—	—	85
Ammonium chloride ..	21,500	143,500	6,287,400	13,813,400
Great Britain ..	—	—	652,700	2,307,600
Brit. India ..	—	—	298,000	119,500
Ammonium sulphate ..	843,800	321,500	104,354,500	344,380,200
Anethol; terpineol; vanillin and other synthetic perfumes ..	31,500	34,100	451,500	643,100
Great Britain ..	—	—	38,500	56,600
Brit. India ..	—	—	14,800	27,200
Anise, camphor, juniper, rosemary and other essential oils; menthol ..	702,000	1,115,500	383,900	430,400
Great Britain ..	—	—	30,400	30,000
Brit. India ..	—	—	30,000	7,800
Ceylon ..	—	—	48,900	—
Australia ..	—	—	37,100	—
Benzoic acid, sodium benzoate ..	—	*1,900	—	*125,300
Bismuth salts ..	—	—	—	*29,600
Boric acid; borax ..	2,326,100	6,021,500	2,260,000	1,474,800
Great Britain ..	—	4,162,300	—	—
Brit. India ..	—	—	—	74,200
Bromides, potassium, sodium, iron, ammonium ..	39,900	101,400	†953,800	†597,600
Great Britain ..	—	—	†83,400	†139,200
U.S.A. ..	—	—	†550,600	†132,300
Bromine ..	33,400	7,300	88,500	275,500
Great Britain ..	—	—	—	110,900
Camphor; manna ..	123,200	280,000	722,100	1,482,400
Japan ..	—	205,800	—	—
France ..	—	—	57,300	105,200

\* Amounts for October-December 1925 only.

	Imports		Exports	
	1924	1925	1924	1925
	Kilos	Kilos	Kilos	Kilos
Camphor; manna ..	—	—	—	—
Great Britain ..	—	—	80,500	147,100
Brit. India ..	—	—	50,600	56,500
U.S.A. ..	—	—	308,300	930,000
Cardamoms ..	77,200	52,500	—	—
Brit. India ..	—	20,800	—	—
Ceylon ..	—	26,400	—	—
Castor oil ..	3,170,900	6,459,100	—	*36,900
Great Britain ..	1,784,000	2,873,400	—	—
Brit. India ..	—	320,300	—	—
U.S.A. ..	—	152,700	—	—
Catechu ..	349,200	577,200	—	—
Brit. India ..	—	273,400	—	—
Caustic potash ..	54,700	5,600	21,780,300	28,981,100
Great Britain ..	—	—	2,544,400	4,159,300
Caustic soda ..	6,675,700	261,000	1,710,300	8,997,200
Great Britain ..	4,893,000	192,400	—	—
Chemically prepared foods (sanatogen, etc.) ..	306,800	342,700	361,900	406,100
Great Britain ..	—	17,400	—	—
Chloroform; chloral hydrate ..	600	—	192,700	241,700
Cinchona ..	1,256,500	1,823,900	45,100	51,000
Cinchona alkaloids, and compounds ..	3,184	1,277	77,368	97,679
Great Britain ..	—	—	—	2,268
Brit. India ..	—	—	—	7,139
Russia ..	—	—	18,538	29,015
Cinnamon ..	347,300	247,200	—	—
Ceylon ..	—	245,000	—	—
Citric acid ..	71,400	348,800	25,700	24,100
Cloves ..	1,003,600	759,400	—	—
Brit. East Africa ..	—	691,800	—	—
Cocoa butter ..	1,100	600	5,333,100	1,346,900
Canada ..	—	—	907,700	261,300
Coppersulphate; copper and iron sulphate ..	500	312,200	6,481,000	3,952,100
Great Britain ..	—	—	467,900	47,700
Brit. India ..	—	—	285,000	302,200
Canada ..	—	—	506,400	36,900
Cosmetics; tooth powders, perfumes and beauty preparations not elsewhere enumerated ..	9,400	43,800	767,200	837,300
Great Britain ..	—	—	25,000	49,500
Brit. India ..	—	—	32,300	53,700
Brit. West Africa ..	—	—	46,300	51,400
Australia ..	—	—	—	20,500
Cream of tartar ..	—	—	—	—
Rochelle salt ..	1,856,300	2,927,700	589,200	969,600
Great Britain ..	—	—	62,900	46,700
Canada ..	—	—	25,300	—
Eau de Cologne ..	—	—	128,500	246,700
Great Britain ..	—	—	—	10,900
Brit. India ..	—	—	—	23,100
Brit. Sth. Africa ..	—	—	—	30,000
Australia ..	—	—	—	26,800
Ether ..	—	—	125,600	182,700
Brit. India ..	—	—	—	16,700
Formic acid, formiates ..	—	—	—	*816,900
Great Britain ..	—	—	—	102,600
Fusel oils; amyl, butyl, propyl alcohol ..	174,200	88,100	316,900	1,773,900
Great Britain ..	—	—	—	377,700
Galls ..	1,740,700	1,492,100	—	—
Gelatin ..	51,800	76,600	1,086,000	1,351,000
Great Britain ..	—	—	96,900	175,300
Canada ..	—	—	35,300	—
Ginger ..	174,000	188,700	—	—
Glycerin, crude ..	835,700	570,800	304,400	1,016,100
Great Britain ..	—	35,600	—	—
Glycerin, refined ..	175,600	174,300	495,000	1,928,300
Canada ..	—	—	—	274,200
Hair and mouth washes, alcoholic or ethereal ..	—	—	236,900	475,700
Malacca ..	—	—	—	119,800
Hexamethylene-tetramine ..	—	—	—	*29,000
Honey, including artificial honey ..	2,669,500	4,483,500	16,800	7,400
Chile ..	—	490,500	—	—
Cuba ..	—	1,248,100	—	—
Dominican Republic ..	—	90,800	—	—
Guatemala ..	—	534,700	—	—
Haiti ..	—	575,800	—	—
U.S.A. ..	—	696,300	—	—
Iodides, potassium, sodium, ammonium ..	300	400	†78,300	†72,500
Brit. India ..	—	—	†2,000	†3,200
Iodine ..	102,600	377,000	59,100	88,100
Lactic acid; lactates ..	1,200	18,600	835,200	1,680,900
Great Britain ..	—	—	—	294,700
Lead acetate ..	4,600	—	1,138,200	1,258,600
Great Britain ..	—	—	—	352,700
Brit. India ..	—	—	—	184,000

† Includes bromoform.

‡ Includes iodoform.

	Imports		Exports	
	1924	1925	1924	1925
	Kilos	Kilos	Kilos	Kilos
Linseed ..	129,769,000	250,737,700	621,100	1,670,600
Brit. India ..	—	25,888,400	—	—
Litharge ..	737,400	829,800	387,000	1,065,000
Great Britain ..	—	355,100	—	323,100
Lithopone ..	40,300	120,300	6,151,200	12,734,400
Great Britain ..	—	—	—	4,853,100
Magnesium sulphate ..	—	—	25,689,300	32,058,400
Great Britain ..	—	—	—	5,398,500
Brit. India ..	—	—	—	1,619,000
Medicines and pharmaceutical products, prepared, not otherwise enumerated ..	—	—	—	—
Great Britain ..	—	*13,600	—	*301,700
Brit. Sth. Africa ..	—	—	—	*5,400
Brit. India ..	—	—	—	*2,700
Malacca ..	—	—	—	*8,000
Australia ..	—	—	—	*1,400
U.S.A. ..	—	—	—	*800
Medicines and pharmaceutical products, not prepared, not elsewhere enumerated ..	—	—	—	—
Great Britain ..	—	*1,100	—	*284,800
Brit. India ..	—	—	—	*5,800
U.S.A. ..	—	—	—	*3,900
Mercury, also amalgams ..	490,900	781,500	13,200	24,100
Great Britain ..	—	43,100	—	—
Milk sugar ..	44,100	79,000	292,800	12,200
Brit. India ..	—	—	—	4,400
Mineral waters, natural and artificial ..	—	—	—	—
Great Britain ..	\$1,360,300	\$1,908,300	\$1,713,800	\$8,632,600
Brit. West Africa ..	—	—	—	\$1,989,400
U.S.A. ..	—	—	—	\$363,800
Morphine; codeine, and compounds ..	—	*48	—	*5,617
Japan ..	—	—	—	*4,258
Musk, civet, ambergris castoreum ..	1,374	750	—	—
Canada ..	—	138	—	—
Opium ..	84,100	150,700	1,500	1,800
France ..	—	9,700	—	—
Yugo-Slavia ..	—	5,700	—	—
Switzerland ..	—	9,800	—	—
Turkey ..	—	90,400	—	—
Oxalic acid; pot. oxalate ..	3,200	9,100	2,967,900	4,584,200
Great Britain ..	—	—	—	664,900
Pepper ..	3,828,900	4,411,100	—	—
Brit. India ..	1,451,500	1,330,400	—	—
Malacca ..	—	261,400	—	—
Perfumed fats, oils, pomades ..	16,900	22,900	219,300	345,700
Brit. West Africa ..	—	—	—	238,300
Perfumed waters, non-alcoholic or ethereal ..	4,900	1,900	—	—
Perfumes, alcoholic or ethereal ..	—	—	520,000	709,100
Brit. India ..	—	—	—	38,300
Brit. West Africa ..	—	—	—	122,000
Malacca ..	—	—	—	73,900
Australia ..	—	—	—	23,700
Phenol ..	455,900	2,207,400	592,800	1,032,100
Great Britain ..	—	1,434,400	—	—
Potassium chlorate ..	66,200	73,900	11,433,200	15,877,300
Brit. India ..	—	—	415,900	320,000
Potassium chloride ..	12,800	—	110,779,200	196,672,400
Great Britain ..	—	—	11,641,900	13,421,700
Brit. Sth. Africa ..	—	—	—	2,895,100
Brit. India ..	—	—	—	3,109,600
Ceylon ..	—	—	—	5,296,200
Potassium cyanide; sod. cyanide ..	20,900	47,200	1,271,400	1,520,900
Great Britain ..	—	28,300	—	—
Potassium permanganate; pot. manganate ..	—	1,800	1,011,500	412,600
Great Britain ..	—	—	—	103,200
Potassium sulphate ..	52,800	—	94,970,900	129,369,000
Great Britain ..	—	—	4,511,300	7,965,100
Brit. Sth. Africa ..	—	—	—	2,442,300
Ceylon ..	—	—	—	1,066,800
Newfoundland ..	—	—	—	366,800
Australia ..	—	—	—	4,110,500
Red lead ..	868,400	1,253,400	976,800	2,578,800
Great Britain ..	—	654,300	—	587,200
Rhubarb ..	77,200	55,800	26,800	26,600
Saffron ..	—	*800	—	—
Salicylic acid; salicylates ..	—	—	—	*61,500
Secret remedies ..	2,800	4,300	—	—
Shellac ..	2,472,100	3,843,000	829,100	925,400
Great Britain ..	—	14,300	—	36,500
Brit. India ..	2,218,800	3,630,100	—	—
Siam ..	—	31,800	—	—
U.S.A. ..	—	27,000	—	251,300
Spermaceti ..	12,700	15,300	2,600	2,600

\* Amounts for October-December 1925 only.

§ Litres.

‡ Includes iodoform.

	Imports		Exports	
	1924	1925	1924	1925
	Kilos	Kilos	Kilos	Kilos
Sugar (beet) gran. ..	11,247,900	16,947,100	266,064,000	59,843,800
Great Britain ..	—	—	55,996,600	7,269,900
Brit. India ..	—	—	—	4,770,000
Tartar emetic, and other preparations of antimony ..	547,800	782,800	639,000	664,000
Great Britain ..	—	206,200	—	—
Tartaric acid ..	7,300	18,400	903,800	3,576,500
Great Britain ..	—	—	135,600	1,033,400
U.S.A. ..	—	—	43,700	531,600
Tin oxide ..	5,400	4,100	313,400	788,300
Great Britain ..	—	—	—	415,100
Tragacanth ..	433,800	606,200	121,300	244,700
Vanilla ..	81,000	85,800	—	—
France ..	—	14,400	—	—
Madagascar ..	—	45,500	—	—
White lead ..	162,200	382,800	1,269,700	2,585,700
Great Britain ..	—	—	—	1,365,800
Zinc oxide, white ..	387,800	155,500	5,456,600	9,733,800
Great Britain ..	—	—	—	434,500

## Associations' Winter Session

**Ealing.**—A combined meeting of the Ealing Pharmacists' Association and the Ealing Branch of the Pharmaceutical Society was held on January 28, Mr. R. F. Edkins in the chair. Mr. H. F. Hutchison gave an interesting lantern lecture, entitled *Architecture, Good, Bad, and Indifferent*, following which Mr. Edkins proposed a vote of thanks to the speaker.

**London (W.).**—A meeting of the Western Pharmacists' Association was held at 192 Oxford Street, W.1, on February 10, the President (Mr. J. P. Ellerington) in the chair. Dr. George Pernet delivered an address on *Pharmacists and Some Common Diseases of the Skin* before an audience of more than average size, reinforced by visitors from the National Association of Women Pharmacists. The use of coloured chalks on a blackboard and the circulation of photographs illustrated a lucid and informative survey of some of the more frequently met types of skin disease. The first of these dealt with was ringworm of the scalp in children, in which x-rays were now applied to the whole surface, causing the hair to be shed, and with it the fungus. An iodine and spirit lotion was then used to prevent reinfection. Iodine as routine treatment prior to x-ray administration was useless, and the rays could not be used until its effects had gone off. Ringworm apart from the scalp was on a different footing. The name urticaria covered many kinds of skin complaint, some of which yielded easily to treatment, while others were recurrent and rebellious. Herpes zoster, again, required very skilful handling; if it occurred in the face it should be referred to a specialist. The subsequent pain was very great, and very difficult to treat. Alopecia areata needed to be diagnosed on positive grounds, as it might be confounded with other things. General as well as local treatment was needed, so that the causal factor might be got rid of. Chrysarobin ointment might lead to a bad inflammatory reaction, and it had also been known to do serious harm in a case of psoriasis. Arsenic was not a panacea in skin troubles. Potassa sulphurata, used in scabies, spoiled enamelled baths, but did not affect those made of marble. Blue ointment was not to be recommended in verminous cases, and potassium iodide, administered lavishly in blood mixtures, might give rise to cutaneous rashes. Veronal and antipyrine were other familiar chemicals with the same tendency. At the close of the address several questions were asked, eliciting further valuable hints. Balsam of Peru, Dr. Pernet remarked, had been known to lead to kidney trouble. The causation of warts was unknown; some were very difficult to treat, but others disappeared spontaneously. Diseases of the skin were one of the most difficult departments of medicine. On the motion of the President, a cordial vote of thanks was carried by acclamation.

**FOOTBALL.**—In a football match, on February 3, a team of Boots, Ltd., Blackpool, defeated (6-2) the representatives of other assistants in the town.



## Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, February 11.

THE Mincing Lane produce markets have again displayed little animation, and the volume of business done is disappointing, due partly to lack of confidence and financial stringency, which is more observable at this period of the year. At the same time (apart from speculative items like shellac, pepper, cloves, and rubber), prices are well maintained. Among the crude drugs which have advanced are mandrake, ergot, hydrastis, juniper berries, and valerian root. Ipecacuanha is very firm, with higher prices asked by first hands; balsam tolu has been dealt in at cheaper rates; acacia gums and agar agar (to arrive) have declined; yellow mustard seed is scarce and dearer for all grades; while bleached Ceylon cardamoms are also scarce; lobelia, senega and beeswax are firm, the latter being dearer. Menthol is about steady. Of the essential oils lemon continues to attract interest, and prices have again advanced. The other Messina essences are also moving upwards. Geranium is now at a low figure and attracting buyers. Patchouli is cheaper to arrive. Spearmint has also declined. Juniper berry is tending firmer; Californian orange is dearer. American peppermint oil to arrive has been offered at a substantial decline. Japanese dementholised is still being offered forward by speculators at below prices cabled from Japan. Business is fairly good in pharmaceutical chemicals, but orders are mostly small, and price changes are unimportant. Bromides continue dull; guaiacol carbonate is rather firmer; methyl sulphonol and theobromine sodium salicylate are cheaper. Salicylates continue to be keenly cut and salol is irregular. Mercurials may advance. Among industrial chemicals conditions show little change, and alterations in values are few. Cream of tartar is in more inquiry, with prices inclined to harden. Formaldehyde is easier and sodium chlorate firmer. Lead products are steady, while zinc products are easier. With the exception of a further slight advance in pitch, and an easier feeling in cresylic acid, coal tar products are steady. Among so-called vegetable oils business continues depressed, the downward trend of values still being in evidence. Cotton, castor, palm kernel, palm, soya and wood-oils are all more or less cheaper; turpentine has fluctuated considerably, and linseed is fairly steady.

Higher	Firmer	Easier	Lower
Carmine	Bergamot oil	Acid oils	Adrenalin
Ergot	Citric acid	Almond oil	Agar agar
Guaiacol	Cocoa butter	Cajuput oil	(c.i.f.)
carbonate	Hydrastis	Castor oil	Balsam tolu
Ipecacuanha	Juniperberry oil	Cinnamon leaf	Citronella oil
(Matto Grosso)	Pitch	oil	Cod liver oil
Juniper berries	Sodium	Cotton oils	Diatase
Lemon oil	chlorate	Cresylic acid	Geranium oil
Lemongrass oil	Tartaric acid	Formaldehyde	Gum acacia
Mustard seed		Lime juice	Methyl
Orange oils		Palmarosa oil	sulphonol
Wax, bees'		Palm oil	Palm kernel oil
		Pimento	Pepper
		Sassafras oil	Peppermint oil
		Soya oil	(Amer.)
		Spearmint oil	Rubber
			Shellac
			Theobromine

### Cablegrams

BERGEN, February 10.—The catch of cod since the opening of the season amounts to 2,100,000, against 1,700,000 at the same date of last year, and the yield of steam-refined medicinal oil is 3,320 hectolitres, against 2,993 last year. The quotation for finest non-freezing Lofoten oil is cheaper at about 128s. per barrel c.i.f. London.

NEW YORK, February 10.—Business is quiet. Peppermint oil in tins has declined by \$2.00 to \$22.00 per lb. Curaçao aloes is cheaper at 9½c. per lb. Taraxacum has been reduced to 17c., and senega to 67c. per lb. Belladonna root is higher at 15½c. per lb.

### Crude Drugs, etc.

AGAR AGAR.—Shipment prices have further declined on selling pressure from Japan, No. 1 Kobe offering for January-March shipment at 3s. 5½d. per lb. c.i.f., and No. 1 Yokohama at 3s. 4d. per lb. c.i.f.

ALBUMEN.—Prime Chinese egg is 3s. 3d. to 3s. 4d. per lb. spot, and March-May shipment 3s. 1d. c.i.f.

ALMONDS are still tending higher, and unless the demand falls off substantially supplies will be insufficient for the remainder of the season. Sicily, Bari, Faro, Majorca and Persian are all reported scarce, and present high prices of fresh imports are not attractive. Morocco, which are largely used for manufacturing purposes, are unusually scarce, and producers' prices are above the spot parity.

ALOES.—Business has been done in "tale quale" Curaçao at 53s. per cwt. c.i.f.

ANTIMONY.—Developments seem very uncertain, while the tendency of Chinese regulus again became easier in the absence of any notable demand, and c.i.f. terms for shipment are about £80 a ton. Spot lots, being scarce, continue to be held for a high premium, or about £92. English high-grade refined is £99 10s. to £100. Crude is chiefly nominal at around £61 per ton.

BALSAMS.—Sales of balsam tolu have been made at 4s. 6d. per lb. on the spot, at which price there are further sellers. Copaiba B.P. varies from 1s. 10d. to 2s. 1d. per lb., and balsam peru is offered at 6s. 6d. to 6s. 9d. per lb. for genuine of direct import.

BISMUTH.—An arrival of 2,240 lb. metal is reported from Spain.

CADMIUM.—There is a fair demand for Australian, which is selling at about 1s. 9d. per lb., but American continues to be held at a prohibitive figure. Continental metal is also available in fair quantities, including Scandinavian.

CAMPHOR (REFINED).—Japanese slabs are rather firmer to arrive at 2s. 9d. c.i.f., with spot lots obtainable at 2s. 8½d.; ¼ oz. tablets are quoted at 3s. 3d., both c.i.f. and spot.

CARMINE is again higher at from 19s. 6d. to 20s. per lb. for pure Nacaral.

CLOVES continue quiet. Zanzibar offer on the spot at 10d. to 10½d. per lb., and to arrive, sellers of January-March shipment quote 10d. c.i.f. The landings in London during the week ended February 6 were 200, and the deliveries 204, leaving a stock of 13,993 bales, against 13,120 in 1925 and 32,175 bales in 1924. The landings in London so far this year have been 1,171, against 498, and the deliveries 1,378, against 2,382 bales in 1925.

COCOA BUTTER is firmer, C.F.R. being quoted at 1s. 4½d. per lb., and prime English at 1s. 4d., in not less than one-ton lots.

COD-LIVER OIL.—There have been several speculative offers of the new Lofoten oil from Norway this week, and about 128s. to 130s. per barrel c.i.f. London has been quoted; some business is reported at around these figures. The fishing is making favourable progress, but it is as yet too early to form any judgment as to whether the yield is to be again prolific. The spot value of finest medicinal Lofoten oil (1925) is about 140s. per barrel.

DRAGON'S BLOOD.—At auction on Friday, February 5, 15 cases Singapore reboiled were offered and bought in at £30, the highest bid being £20 for fine; pickings were retired at £22 per cwt.

ERGOT.—Spot holders of sound Spanish now ask 3s. per lb., being dearer. Few, if any, c.i.f. offers appear to be available, the nearest being 3s. c.i.f. for new crop sound Spanish.

GENTIAN is in fair demand, with sales of good French at about 27s. per cwt., c.i.f. London.

GINGER.—West African is offered on the spot at 47s. 6d. per cwt.: forward is slow of sale owing to wide ideas of value between buyers and sellers. The same applies to



Cochin for shipment; spot value of washed rough is 105s. and Calicut 110s.; small Jamaica is 85s. to 90s., and bold 100s. to 120s.

**GUM ACACIA** is cheaper, both on spot and forward. Natural Kordofan sorts on the spot can be had at 62s. 6d., and cleaned at 55s. 6d. per cwt. To arrive, February-March shipment of sorts is quoted about 46s. 6d. c.i.f., and cleaned at 48s. 6d. c.i.f.

**HYDRASTIS**.—There has been a fair inquiry on the spot and prices are tending firmer. Probably 22s. per lb. would now have to be paid. A recent quotation for shipment was 21s. c.i.f.

**PECACUANHA**.—First-hand sellers of Matto Grosso now ask 13s. 6d. per lb., and sales are reported at this figure.

**JUNIPER BERRIES**.—Spot holders now ask 29s. per cwt.

**LIME JUICE**.—With fairly heavy stocks, prices are easier, good palish Jamaica offering at 2s. 6d. per gallon, and Dominica at 2s. 3d.

**LOBELIA HERB** remains firm, both on spot and at origin: 1s. 9d. will buy on the spot.

**MALE FERN EXTRACT** is quoted at from 5s. to 5s. 3d. per lb. for 24 to 25 per cent.

**MENTHOL** is steady, with case lots of Kobayashi-Suzuki selling at from 23s. to 23s. 6d. per lb., and for five-case lots 22s. 6d. is asked. January-March shipment is 21s. per lb. c.i.f.

**MERCURY**.—There has been very little doing of late, and with a few more offers about, chiefly of small lots, buyers have been able to place orders at slight concessions on either side of £15 per bottle. There has been practically no inquiry from the Far East. Although it is persistently asserted that Continental producers are well sold up, the tendency is somewhat uncertain.

**MYRRH** is firm on reduced London stocks returned at 281, against 579 last year, with no arrivals in January and 50 delivered. Good Aden sorts offer at £5 5s., and pale dusty at 85s.

**PEPPER** has further declined. Fair black Singapore on the spot is 1d. to 2d. cheaper at 1s. 1d. to 1s. 1½d. per lb. January-March shipment has been sold at 11d. to 10½d., March-May at 11½d. to 11d. c.i.f. Lampong has declined 2d. to 1s. 1d. to 1s. 1½d.; January-March has been sold at from 11d. to 9½d. to 10d., March-May at 11½d. to 11d., May-July 10d. to 9½d., August-October 8½d. to 8d. c.i.f. Tellicherry is 1s. 3½d. spot, and January-March shipment 130s. c.i.f. Aleppo is 1s. 3d. spot, and January-March shipment 125s. c.i.f. White Muntok has declined 1d. per lb. to 1s. 4d. For January-March shipment London standard has been sold at 1s. 4d. to 1s. 2½d. to 1s. 3d., March-May at 1s. 4½d. to 1s. 3d. to 1s. 3½d. to 1s. 3½d. Singapore is 1d. cheaper on spot at 1s. 4d., and January-March is 1s. 2½d. c.i.f.

**PIMENTO** is cheaper with spot sellers at 7d. per lb., and to arrive February-March shipment is quoted at 65s. per cwt. c.i.f.

**PODOPHYLLUM ROOT**.—*P. Peltatum* is dearer, owing to short supplies in the United States, 65s. per cwt. c.i.f. and upwards being quoted; spot is 70s.

**RUBBER** is again lower, and spot was offered freely at the close down to 2s. 7½d. per lb. On Monday prices advanced to 2s. 10½d. for spot on fairly substantial buying orders from New York, but immediately these were filled a rapid decline took place and buyers were conspicuous by their absence. In spite of the proposal by the leading importers to withhold supplies of spot from the market, it seems difficult to hold up prices by veiled threats, as buyers are able to pick up second-hand parcels without experiencing much difficulty. Stocks, as anticipated, were again reduced by 388 tons last week, as deliveries were fairly heavy, but an increase may be expected next week, as shipments from the East are increasing. It seems that lower prices will be the order for the time being, but violent fluctuations will be experienced. Quotations:—Wednesday, 5 p.m.: No. 1 standard ribbed smoked sheet, spot and February, 2s. 7½d.; April-June, 2s. 7½d.; July-September, 2s. 6½d. per lb.

**SEEDS**.—With continued inactivity on the part of buyers, it is not surprising that prices for seeds remain on the easy side. There are no changes from previously recorded values, which are as under: **CANARY**.—Mazagan, 27s. to 27s. 6d. per cwt.; Saffi, 26s. 6d.; Larache, 26s.; Dutch, 24s. 6d.; Spanish, good bold 35s. per cwt., and

small 30s. **CUMIN**.—Maltese is 38s. per cwt. spot, and 30s. c.i.f. for forward shipments; Moroccan, 35s. to 37s. 6d. per cwt. **ANISE**.—Spanish is 50s. per cwt.; Russian, 49s.; and Levant, 45s. **CORIANDER**.—Moroccan is 16s. to 16s. 6d. per cwt.; and Indian and Russian, 15s. 6d. **DILL** is 20s. 6d. per cwt., and possibly a little under. **FENUGREEK**.—Moroccan is 14s. to 16s. per cwt., according to quality. **HEMP**.—Manchurian is 15s. per cwt. **LINSEED**.—Moroccan, 22s. 6d. per cwt.; Dutch, 20s. 6d. to 21s. 6d.; English, 28s. for good quality. **MILLET**.—Moroccan yellow is 9s. 10½d. per cwt. c.i.f. London. **MUSTARD**.—English is still on the scarce side, but business has been done at 47s. per cwt. f.o.b. London for choice quality.

**SHELLAC** shows a further decline, usual standard TN orange offering at 165s. per cwt. on the spot; fine second orange is 205s., superfine 220s. to 300s., pure button 230s., AC cakey 190s. To arrive, TN for February-March shipment is offered at 150s. c.i.f. The sales for delivery include March at 147s. 6d. to 142s. 6d. to 155s., and May at 145s. to 155s. to 150s. Calcutta spot fell to rs. 68, subsequently advancing to rs. 70.

**STARCH PRODUCTS, ETC.**—Dutch *maize starch powder* is unchanged at 14s. 6d. per cwt. on the spot, and for February-April shipment 14s. 6d. f.o.b. is quoted. American for February-April delivery is 14s. 9d. Pearl starch for February-April delivery is 14s. 3d., ex store London. Dutch *farina* is 16s. per cwt. on the spot, and 14s. 3d. f.o.b. for February shipment. Polish is 15s. 6d. per cwt. on the spot. Dutch *maize starch crystals* is 20s. 6d. on the spot, and American 21s. net per cwt., ex store London, for February-April delivery. Dutch *dextrin* is unchanged at 21s. 6d. for superior on the spot, and 20s. for No. 2. American canary is 18s. 3d. for February-April delivery. White for February-April is 18s. per cwt., ex store London.

**VALERIAN ROOT**.—In the absence of supplies prices are nominal on the spot. From Hamburg, 230s. c.i.f. is quoted.

**WAX, BEES'**.—The deliveries in January were 965 packages, leaving a stock of 689, against 1,368 last year. The market is strong, and a good business has been done since the auctions at higher prices. Jamaica is £9 5s. to £9 10s.; East African, £9 7s. 6d. to £9 10s.; Benguela, £9 7s. 6d.; bleached Calcutta, £10 10s.; Madagascar, £8 17s. 6d. to £9; Abyssinian, £9 5s. per cwt. Morocco, £9 2s. 6d. (£9 paid for quantity).

**WAX, VEGETABLE**.—Carnauba remains very firm and scarce on spot, fatty grey being held for 165s. per cwt., while February-March has been sold at 150s. per cwt. c.i.f., and 152s. 6d. c.i.f. is now asked.

### Essential Oils

**LEMON OIL** continues to advance and is in fair demand. The other Sicilian oils have also become dearer. Cochin lemongrass has been in demand and has advanced. Juniper berry is scarce and dearer. Geranium oils are attracting buyers at the low prices, and there is an easier tendency in peppermint oils. Citronella has declined, and American spearmint is cheaper. Lower prices are quoted for essential almond, cajuput, Ceylon cinnamon leaf, and palmarosa.

**ALMOND**.—Bitter essential oil (sine acid prussic) is cheaper on the spot at from 8s. 6d. to 9s. per lb.

**ANISE (STAR)**.—"Red Ship" on the spot is quiet at 3s. 2d. per lb.

**BAY**.—West Indian distilled is quoted at 8s. to 8s. 6d. per lb. as to percentage.

**BERGAMOT** continues firm and in good demand at from 25s. 6d. to 26s. per lb. for 37 to 38 l.a. For shipment, prices are dearer at from 25s. 6d. to 27s. 6d. c.i.f. as to brand. During the week 80 cases have arrived.

**CAJUPUT** is slow of sale and easier at from 2s. 7d. to 2s. 8d. per lb.

**CANANGA**.—Java is offered at 13s. per lb. c.i.f. Spot is scarce at 13s. 6d.

**CARAWAY**.—Dutch double-rectified is unchanged at from 6s. 6d. to 7s. per lb. Crude is 6s. on the spot.

**CASSIA** on the spot is quiet at 9s. 1½d. per lb. for 80 to 85 c.a., and 7s. 6d. c.i.f. to arrive.

**CINNAMON**.—Ceylon leaf on the spot is quoted at 5s. 7½d. per lb. in cases; 5s. 3d. in drums. For shipment, 4s. 10d. c.i.f. is quoted, which is easier.

**CITRONELLA**.—Java is cheaper at 2s. 10½d. per lb. spot and 2s. 9d. c.i.f. to arrive. Ceylon on the spot is also weaker at 1s. 10½d. and for shipment at 1s. 9d. c.i.f.



CLOVE is unchanged on the spot, with sellers at from 6s. 3d. to 6s. 9d. per lb.

CORIANDER on the spot is quoted at 25s. per lb.

EUCALYPTUS is unchanged with sellers of 70 to 75 per cent. at 1s. 7½d. per lb.

GERANIUM.—Lower prices are again quoted for Bourbonnais from 9s. 6d. to 10s. per lb. c.i.f. Spot is 11s. 6d. Algerian is offered at 12s. on the spot.

GUAIACWOOD.—Spot sellers quote from 4s. 3d. to 4s. 9d. per lb. as to quantity.

HO is quoted on the spot at 6s. 6d. per lb.

JUNIPER BERRY.—B.P. oil continues to advance, from 11s. to 11s. 6d. per lb. being quoted in some directions. There were still offers at 10s. during the week.

LEMON.—Spot demand is fairly active and values have again advanced. For good brands, from 12s. to 12s. 6d. per lb. is being asked, with sales thereat. For shipment, 11s. 6d. to 13s. c.i.f. to arrive is quoted as to brand.

PALERMO, February 3.—The restricted pressings throughout January have continued to disturb the market. The fears here entertained regarding deliveries against forward contracts have been fully justified. Some exporters appear to have been caught short, or unable to secure delivery, and have found themselves compelled to operate on a market on which sellers were already few. During the last few days the advance has been rapid.

LEMONGRASS.—Cochin has been in demand and is dearer at 4s. 2d. per lb. spot, and firm at 3s. 11½d. c.i.f.

ORANGE.—Sicilian sweet continues to advance at the source in sympathy with the lemon market, rather than on account of any real change in the position of the article. Prices range from 12s. to 12s. 6d. per lb. c.i.f. to arrive. Spot can be bought at 11s. to 11s. 6d. Bitter is quoted at 12s. c.i.f. West Indian sweet is firmer at from 8s. 9d. to 9s., and small sales have been made at the higher price. It appears that stocks of bitter West Indian are scarce at the spot, as much of the fruit has been sold, with consequent reduction in pressings for oil. Consignments on the way are quoted at 9s. 6d. Californian is dearer at 6s. 4d. in drums.

OTTO OF ROSE.—Supplies both on the spot and in Bulgaria are very small, the demand this year having been more than sufficient to absorb the small quantity produced. On the spot, from 50s. to 57s. per oz. is quoted for good quality.

PALMAROSA on the spot is cheaper at from 11s. to 11s. 6d. per lb.

PATCHOULI.—Penang is quoted at 21s. 6d. per lb. in small drums. Mysore distilled oil is 30s.

PEPPERMINT.—There is still an absence of business in the open market for Japanese dementholised oil, with the chief brands offering for January-March shipment at 12s. 3d. to 12s. 6d. per lb. c.i.f., and direct offers of what is known as "Five brands" are being made in this market on the basis of about 12s. c.i.f. There are speculative offers in one quarter at about 1s. to 1s. 6d. per lb. less than the foregoing, but buyers continue to hold aloof. Such conditions as these keep the market in a state of ferment, and if an anxious seller wishes to effect a sale, he has to compete against the lowest price that is quoted. We understand that a distressed parcel of January-March shipment was liquidated at a very low figure this week. On the other hand, the big difference in the price between London and Japan has attracted the attention of American buyers, and we understand that a medium-sized order was placed on this market last week and a fairly substantial one this week, the goods to be shipped to New York with the original labels on the tins. Offers are being made from Japan in extremely small quantities only, such as five-case lots. The London spot price of Japanese dementholised oil is 12s. 6d. per lb. During the week ending January 25 ten cases of peppermint oil have arrived at Seattle from Kobe. Cables quoting 90s. per lb. c.i.f. to arrive have been received in London from the States for American natural tin oil, but there are no buyers at the price. At the same time it is suggested that these low offers may have been made in the interests of certain large U.S. buyers. On the spot, price is nominal at 105s. per lb., but near bids would be considered.

PETITGRAIN.—Spot sales of Paraguayan are reported at 8s. 4d. per lb.

PIMENTO.—Original cases are quoted at 10s. 6d. per lb.

ROSEWOOD (BOIS DE ROSE) is quiet but steady at about 11s. 6d. per lb.

SANDALWOOD.—The official Mysore Government prices of B.P. oil are unchanged at 24s. per lb. for 1,000-lb. lots, and 25s. for smaller quantities. West Indian (ol. amyris) is quoted at 5s. 9d.

SASSAFRAS.—Genuine American is easier with offers of original cases at 4s. 3d. to 4s. 6d. per lb.

SPEARMINT.—Absence of demand in U.S. has been followed by lower quotations. On the spot, there are sellers at 52s. 6d. to 55s. per lb.

WORMWOOD on the spot is quoted at 35s. per lb.

The following arrivals have taken place from the countries named during the period February 4 to 10 inclusive:—Bergamot (It.), 80 cs.; caraway (Germ.), 19 cs.; cassia (Ch.), 5 cs.; cedarwood (U.S.), 1 dm.; citronella (Jv.) 3 dm., (Br. Ind.) 2 dm., (Cey.) 2 dm.; clove (Fr.), 1 dm.; copaiba (U.S.), 25 cs.; dill (Germ.), 2 cs.; eucalyptus (Aust.), 23 cs.; geranium (Alg.) 4 dm., (Réun.) 9 dm.; gingergrass (Br. Ind.), 8 cs.; lemon (It.) 148 cs., 9 x ½ cs.; lime (B.W.I.) 2 dm., 13 cs., 19 x ½ cs., (U.S.) 4 cs.; orange (It.) 4 cs., (Can.) 12 cs.; peppermint (Jp.), 245 cs.; pine (Germ.), 5 cs.; lemongrass (Guat.) 3 dm., (Br. Ind.) 5 dm.; palmarosa (Jv.), 1 dm.; rosewood (Fr.), 2 dm.; sandalwood (W.I.), 1 cs.; undescribed (It.) 5 cs., (Fr.) 3 cs., (Holl.) 1 dm.

### Pharmaceutical Chemicals, etc.

BUSINESS continues fairly good on limited lines, with competition the chief feature. Bromides remain dull.

ACEFANILIDE continues fairly steady, with dealers quoting from 1s. 6½d. to 1s. 7d. per lb. for crystals or powder; slightly lower prices for big business.

AMIDOPYRIN remains very quiet, with dealers offering at about 12s. 6d. to 12s. 9d. per lb. spot, according to quality.

ASPIRIN.—Quoted prices are steadily maintained at about 2s. 5d. to 2s. 6d. per lb., but with competition keen slightly lower prices have been accepted for large quantities.

BARBITONE is steady but not active; dealers quote at about 9s. 6d. to 9s. 9d. per lb.

BENZOIC ACID (B.P.).—British makers continue to quote at 2s. to 2s. 4d. per lb., ex works. Dealers' prices for Continental, practically free from chlorine, spot, 3s. to 3s. 3d.

BENZONAPHTHOL is quiet but steady as quoted at 3s. 3d. per lb. spot.

BROMIDES.—This market continues dull, with no change to report; conditions are not steady: ammonium, about 2s. 3d. per lb.; potassium, B.P. crystals or granular, 1s. 8½d. to 1s. 8¾d. per lb.; sodium, B.P. crystals or granular, 1s. 10d. to 1s. 11d. per lb., according to quantity. There was a slightly better demand for bromides during the past week: potassium bromide was quoted at \$59, and sodium bromide \$60 per 100 kilos, for export.

CALCIUM LACTATE.—Fair business has been done at cut prices: dealers quote from 1s. 4½d. to 1s. 6d. per lb.; British makers, from 1s. 4d. to 1s. 5d. per lb., ex works.

CHLORAL HYDRATE.—Fair business in duty-paid crystals is reported, with prices round about 3s. 3½d. to 3s. 5d. per lb., as to quantity.

CITRIC ACID (B.P. crystals).—Large parcels continue to be quoted at 1s. 3½d. to 1s. 3¾d. per lb., less 5 per cent.; about 1s. 3¾d. to 1s. 4d. for small lots; market has a firmer tendency.

CREOSOTE (B.P.).—Dealers' prices are very steady as quoted at 1s. 11d. to 2s. per lb.

CREOSOTE CARBONATE remains dull in the region of 6s. 3d. to 6s. 6d. per lb.

DIASTASE from malt is lower at 9s. 6d. per lb., and French Codex is 12s. 6d. per lb.

GUAIACOL CARBONATE continues unchanged at about 7s. 3d. to 7s. 6d. per lb., with moderate business; liquid is 5s. 6d. to 5s. 9d., and crystals 6s. 9d. to 7s.

HEXAMINE.—Fair business is being done, but competition is cutting prices very fine: quoted at 2s. 4d. to 2s. 5d. per lb.

HYDROQUINONE is well maintained on a fairly active market at about 4s. 7½d. to 5s. per lb., according to quantity.

LACTIC ACID is quoted at 2s. 3d. per lb. in demijohns, and a shade less for quantities of B.P.; technical, 50 per cent. by weight, £41 per ton, spot.

MERCURIALS.—An advance in mercurials has been long overdue, and there is a possibility of prices being adjusted more in accordance with the present cost of metal, which would mean a rise of 3d. per lb. in the salts.

METHYL SALICYLATE from dealers is offered in carboys at about 1s. 6d. to 1s. 7d.; single bottles, 2s. per lb.; market shows some life.

METHYL SULPHONAL is quiet, with dealers' prices irregular, offering at from 15s. 6d. to 16s. 6d.

MILK SUGAR.—Dealers' prices on spot for B.P. finest Dutch are unchanged: two-cwt. cases, 75s.; five cases, 73s. 6d.; ten cases, 73s. per cwt.

PARAFORMALDEHYDE is steady, with fair business being done: 100 per cent. powder, on spot, 1s. 11d. to 2s. per lb., according to quantity.

PARALDEHYDE does not move very briskly: quoted prices range from 1s. 2d. to 1s. 6d. per lb., according to quantity and packing.

PHENACETIN.—Conditions are steady, but competition severe: quoted from 4s. to 4s. 2d. per lb., the lower price being for cwt. lots.

PHENAZONE is maintained at 6s. 2d. to 6s. 4d. per lb., with dealers doing fair business.



PHENOLPHTHALEIN shows no change, with one-cwt. lots quoted at about 4s. 3d. per lb. Large quantities at cheaper figures. Business is quiet.

POTASSIUM PERMANGANATE (B.P.).—Dealers are cutting the market badly to secure business: quoted at 7½d. per lb. for five-cwt. lots, in drums.

POTASSIUM SULPHOGUAIACOLATE seems of little interest, with offers at 5s. 6d. per lb.

RESORCIN holds steady with dealers selling fairly well at about 3s. 9d. per lb.

SALICYLIC ACID (B.P.).—Price cutting to secure business is noted. Dealers quote from 1s. 3½d. to 1s. 5d. per lb., according to quantity, spot. British makers' list prices, 1s. 3d. to 1s. 6d. per lb., ex works. Technical, 10½d. to 11d. per lb.

SALOL is rather irregular, with prices varying from 3s. 1d. to 3s. 4d. per lb. The lower price for large lots.

SANTONIN.—The official sub-distributors of santonin have adjusted their scale of prices to the same level as those of the official distributors—the Eastern and Russian Trading Co., Ltd. Lots of one kilo are £60; three kilos, £58; five kilos, £57; ten kilos, £55; and twenty-five kilos, £53 10s. per kilo, net cash, ex warehouse, London.

SODIUM BENZOATE (B.P.).—Business continues fair, with prices slightly cheaper for quantities at about 1s. 8d. to 1s. 9d. per lb.

SODIUM DIETHYLBARBITURATE is dull and easy as quoted at about 9s. 6d. to 9s. 9d. per lb.

SODIUM SALICYLATE continues fairly active, with keen competition for business. B.P. crystals, 1s. 10½d. to 1s. 11½d. per lb. B.P. powder, 1s. 9½d. to 1s. 10½d. per lb. Lower prices for large parcels.

SULPHONAL is very quiet at about 11s. 3d. per lb.

TANNIC ACID.—B.P. leviss is quiet but steady at 2s. 8½d. to 2s. 10d. per lb., according to quantity.

TARTARIC ACID (B.P. crystals).—The market remains rather slow, with dealers offering for forward delivery at about 11½d. to 11½d. per lb., less 5 per cent., according to quantity.

TARTAR EMETIC is steady but rather quiet: dealers quote technical 43/44 per cent. at about 11½d. per lb. spot, and a shade less for arrival in quantities.

THEOBROMINE.—The pure alkaloid is 11s. 6d. to 12s., and theobromine sodium salicylate is 7s. 3d. per lb.

THYMOL is unchanged, with dealers quoting 12s. to 12s. 6d. per lb. Business limited.

VANILLIN (100 per cent. from cloves) is in fair demand at about 21s. 9d. to 22s. 6d. per lb., according to quantity.

The following prices are also current:—Adrenalin, pure natural, 5s. to 6s. per grain; synthetic, 4s. 6d. per grain; ammon. ichthyosulphonate, 1s. 5d. to 1s. 7d. in 1-lb. tins; lecithin ex ovo, 15s. 6d. to 16s. per lb.; quinine sulphate, 2s. 1d. to 2s. 1½d. per oz.; silver colloidal, 70 per cent., 7s. per lb.; silver nucleinate, 20 per cent., 25s. per lb.; silver proteinate, 8 per cent., 11s. 6d. per lb.; tannin albuminate, 1s. 9d. per lb.; yohimbine hydrochloride, 13s. 9d. to 14s. per oz.; saccharin, 550, 4s. 10d. per lb. in 1-lb. tins, f.o.b. Continental port for export.

Among the chemicals which have paid Key Industry duty are the following:—Arevrol, £466; bromides, £141; blankit, £315; benzenaphthol, £224; caffeine, £118; carbon tetrachloride, £237; cocaine hydrochlor., £1148; glycerophosphates, £377; hydroquinone, £337; magnesium hydroxide, £338; oxalic acid, £223; paraformaldehyde, £135; potassium bromide, £516; quinine ethyl carbonate, £226; quinine hydrochloride, £245; strychnine, £106; thorium, £229; unenumerated chemicals, £2,617.

#### Industrial Chemicals, etc.

London, February 10.

CONDITIONS in the spot market show little change on the week. Business has been fair on limited lines, with competition keen.

ACETIC ACID is steady, with business only moderate on spot: 80 per cent. technical, £38; 80 per cent. pure, £39 per ton, in barrels; glacial, pharmaceutical, 99 to 100 per cent., £66, in glass demijohns; glacial, in barrels, £55 per ton, ex wharf.

ACETONE continues steady and in fair demand at about £80 to £81 per ton, in drums, ex wharf, for B.G.S. quality.

ALUM is steady but not very active on spot: lump in casks, £8 15s. to £9 per ton; cheaper for shipment.

AMMONIA (ANHYDROUS).—Dealers' prices for spot, 99.95 per cent., in loaned cylinders, carriage paid, remain at 1s. 2½d. to 1s. 3d. per lb., but prices for contracts are much cheaper than this.

AMMONIUM CHLORIDE has been moving fairly well, but prices are being cut badly on spot: grey galvanising, spot, £24; cheaper to arrive.

AMYL ACETATE.—Pure is quoted by makers at 157s. 6d per cwt.

ARSENIC.—There is but little life, only a few lots of white Cornish powder having been sold at £14 f.o.r., and although it is suggested that this figure might be shaded, agents, as a rule, will not take less. Market conditions in America have remained in the same dull state as for some time past,

while the outlet for calcium arsenate drags, as the boll weevil has been virtually absent in the cotton belt.

BARIUM CHLORIDE (98/100 per cent. prime white crystals) has met with a fair business, with the spot price about £9 7s. 6d. to £9 10s. per ton, in casks; cheaper to come forward.

BARYTES is steady and coming in fairly well: quoted c.i.f. from £3 5s. to £3 15s. per ton, c.i.f., according to quantity and quality.

BLEACHING POWDER.—British makers' prices for home consumers on contract is unchanged at £8 10s. per ton, for four-ton lots, delivered.

COPPER SULPHATE.—The export demand is slow with the larger makers still quoting £24 10s. upwards for casks f.o.b., less 5 per cent., but orders can be placed down to £24 5s., if not less, with some Lancashire makers.

CREAM OF TARTAR.—Rather more inquiry here, and prices are inclined to harden to 76s. to 77s. per cwt., less 2½ per cent., for B.P. quality to arrive. In one quarter there is a seller of B.P. at £74 10s. per ton, ex wharf London, others quoting £76 to £77.

EPSOM SALT is steady but in no great demand: commercial quality, £5 5s. per ton, in bags; shipment prices are cheaper than this.

FORMALDEHYDE is rather cheaper for quantities, and the market is not so firm as hitherto: 40 per cent. volume, about £40 per ton, ex wharf.

GLAUBER'S SALT.—Dealers quote commercial quality on spot at £3 10s. to £3 15s. per ton, in single bags, according to quantity. Market quiet.

LEAD PRODUCTS.—Brown acetate, £42; white, £43 10s. per ton, spot. Red lead, imported, £40 10s.; white lead, dry, £40 2s. 6d.; ground in oil, £41 12s. 6d., c.i.f. London. Market has been steady and business satisfactory.

LITHOPONE is moving well, with dealers' prices maintained: 30 per cent. Continental, red seal, £21 per ton; shipment prices are a shade easier.

OXALIC ACID.—Competition for business is keen: quoted on spot at 3½d. per lb. for quantities; shipment price is about the same figure.

POTASS CAUSTIC.—Prices are unchanged, and business is fair: up to 5 tons, £23 10s.; 5 to 15 tons, £27 10s.; 15 tons and over, £26 10s. per ton, in drums, ex wharf, to arrive.

POTASSIUM CARBONATE is moving in little lots on spot at steady prices: 90/92 per cent., £24 5s.; 96/93 per cent., £25 per ton, in casks.

POTASSIUM CHLORATE.—Fair business is being done with the market steady; spot and forward, about 3½d. per lb.

POTASSIUM PERMANGANATE.—Competition is very severe, with dealers offering commercial in drums at 5½d. per lb.

POTASSIUM PRUSSATE is steady and in fair demand at 7d. to 7½d. per lb., in casks, to arrive.

SAL AMMONIAC.—Price cutting by dealers is recorded here: spot, dog-tooth crystals, £31; medium, £30; fine white crystals, £20 per ton, in casks.

SALTCAKE.—For home consumers British makers quote from £3 per ton, in bulk, delivered.

SODIUM ACETATE is difficult to locate on spot, and is firm at £19 10s. and upwards per ton.

SODIUM CHLORATE is rather firmer, with the spot price about 3d. to 3½d. per lb.

SODIUM HYPOSULPHITE.—British makers continue to quote pea crystals for home consumption at £14 to £15 per ton, delivered to buyer's station, according to quantity. Dealers' prices are steady at £14 and upwards for pea crystals, photographic, in one-cwt. kegs; commercial lump, in casks, £9 per ton, to arrive.

SODIUM PRUSSATE is moving quite well, and prices are steady at 4d. to 4½d. per lb., in casks.

SODIUM SULPHIDE is very flat: 60 to 62 per cent. solid, £11 10s.; broken, £12 10s. per ton, in drums.

SULPHUR has been in moderate demand, and the tone for Sicilian is firm on the basis of £11 to £11 5s. per ton, and £9 to £9 5s. delivered London warehouse. American crude is £5 10s. upwards, delivered Manchester.

ZINC PRODUCTS have been rather easier in view of the considerable setback in metal. There has, however, been a fair demand for zinc-oxide, current prices of English makers ranging from about £42 to £50 and even £55. Zinc dust is £45 to £55, and zinc ashes, £16 10s. to £17 per ton based on 70 per cent.

COAL TAR PRODUCTS, ETC.—Conditions are steady throughout. Pitch shows a further slight advance in prices, with business sustained. ANILINE OIL continues steady and in fair demand at about 7d. per lb., in loaned drums, carriage paid. ANILINE SALT is quiet but steady as quoted, at about 7d. per lb., drums extra, carriage paid. BETANAPHTHOL continues to be offered at about 11½d. per lb., carriage paid. TOLUOL is a bright market with prices steady: commercial 90's, 1s. 8½d.; pure, 1s. 11d. per lb., ex works. NYLOT is active, with supplies limited: pure, 3s. 3d.; commercial, 2s. 3d.



per gallon, ex works. CARBOLIC ACID crystals are quite steady, with the price maintained at 5½d. per lb. f.o.b. in quantities, and there does not seem much prospect of a decline at the moment. CRESYLIC ACID is rather easier at 1s. 7d. to 1s. 9d. per gallon for 97/99 per cent. NAPHTHALENE is in fair request, with prices unchanged; flakes or balls, £13 17s. 6d. to £14; powder, £11 5s.; crystals, £12 15s. per ton, ex wharf. Pure METHYL ALCOHOL is quoted at £47 for one-ton lots in drums, ex wharf; cheaper prices for quantities to arrive. PYRIDINE is lacking any good business at about 17s. 9d. to 18s. per gallon. FITCH continues active, and prices are again slightly dearer at about 61s. to 61s. 6d. per ton, f.o.b. East Coast.

#### Fixed Oils, etc.

CONTINUED depression of business is reported in most products, with further declines in values. Palm oils are again cheaper: cotton, coconut and castor oils remain flat. ACID OILS are still dull, and prices again rather easier: coconut and palm kernel, 38s.; groundnut, 34s.; soya, 32s. spot. CASTOR remains dull and unsettled: pharmaceutical, 49s.; first pressings, 44s.; second pressings, 41s. per cwt., in barrels in not less than one-ton lots; finest Italian, 75s. in cases; French medicinal, 68s. in cases, ex wharf London. COCONUT.—Business still very light: deodorised, spot, 51s. 6d.; Ceylon, 45s. c.i.f.; Cochim, 57s. 6d. c.i.f. COTTON is very flat, and prices are again easier: deodorised, 46s. 6d.; common edible, 44s. 6d.; soapmaking, 42s. 6d.; crude, 36s. 6d. spot. GROUNDNUT is still dull, and prices unsteady: deodorised, spot, 49s.; crude Oriental, 45s. c.i.f. PALM KERNEL is much cheaper on a dull market: deodorised, 46s. 6d.; crude, 42s. 6d. spot. PALM.—Prices are again rather easier, and business is still far from good: Lagos, 37s. 9d.; softs, 37s.; mediums, 38s.; hards, 38s.; bleached, 40s. spot. RAPE is quiet but firm: refined, 52s.; crude, 48s. spot. SOYA is quiet and rather easier: deodorised, 46s.; crude, 41s. spot. LINSEED (raw, naked) closes fairly steady but rather quiet. On spot, 31s. 3d.; February, 29s. 10½d.; March-April, 30s. 4½d.; May-August, 30s. 1½d.; September-December, 30s. 4½d. BOILED OIL, spot, 35s. 3d. Hull, on spot, 31s.; February-April, 30s. 7½d.; May-August, 30s. 7½d.; September-December, 30s. 7½d. TURPENTINE has fluctuated considerably, with an erratic tendency, while dealings were generally fitful between occasionally free offers, and at times some few repurchases to cover contracts on any setback. Latterly the tone became rather firmer again under a better trade demand, and on Wednesday the spot market closed at 65s. 3d.; March-April, 65s. 9d.; and May-June, 64s. 6d. per cwt. A good deal of spirit has been absorbed for shipment to the Continent, and this accounts for the fact that the London deliveries for last week were increased to a large extent, amounting to 3,060 barrels, this making the aggregate since the beginning of the year 12,914 barrels, against 11,433 barrels same period in 1925. The warehouse stocks were 48,350 barrels, compared with 27,080 barrels a year previous. Resin has been very steady, although business has been restricted. American shippers seem reserved in view of the small stocks. C.i.f. terms for shipment for the lower grades range from about 29s. 5d. to 32s. 6d., while W.G. stands at 33s. 6d. and W.W. 34s. 9d. to 35s. The premium wanted on the spot varies from 6s. to 1s. over the above rates. French W.W., 31s. 3d. per cwt. WOOD.—Hankow on spot in barrels is easier at 62s. per cwt.; market dull.

LUBRICATING, MINERAL, AND BURNING OILS, ETC.—These items continue quite steady, although business is not very active. There is no material change to report this week. BENZOL is steady and active; crude 65s., about 1s. 3½d.; standard motor, about 1s. 8½d.; pure, about 1s. 11½d. per gallon, ex works, in tank wagons. FUEL OIL is steady but dull: 950 gravity, £3 17s. 6d.; 890 gravity, £4 7s. 6d. per ton, ex tank. PARAFFIN WAX AND SCALE are quiet: wax, 3½d. to 5d. per lb., according to melting point, in bags. Scale irregular, quoted c.i.f. from 26s. 6d. to 26s. 9d. per cwt. PARAFFIN OILS are unchanged: American standard white, 1s.; water white, 1s. 1d. per gallon, in barrels; Russian prime white kerosene, 6d. to 6½d. ex tank, 6½d. buyers' barrels filled free, 10½d. per gallon, barrels free, ex wharf, London. WHITE OILS remain dull and quoted prices are easy: special No. 1, £23; No. 1, £26 10s.; No. 2, £24 7s. 6d.; No. 3 half-white, £23; No. 4 half-white, about £15 per ton, drums and barrels free, ex wharf, London. SOLVENT NAPHTHAS continue steady, with business moving: 90/160, 1s. 5d. to 1s. 5½d.; heavy, 90/190, 1s. 0½d. to 1s. 1d. per gallon. PETROLEUM JELLIES are very quiet: white to snow white, £55 to £58; amber and yellow, £19 to £22; red vet, £18 17s. 6d.; dark stiff green, £14 per ton, ex wharf, London, barrels free. LUBRICATING OILS.—Business quiet: spot and shipment markets unchanged: spot, pales, £11 to £23 7s. 6d.; reds, £13 5s. to £23 7s. 6d.; dark cylinders, £13 15s. to £34 10s.; filtered cylinders, £21 5s. to £34

per ton, less 2½ per cent., ex wharf, London. SOLUBLE OILS and CUTTING COMPOUNDS, £20 to £23 10s. per ton, according to grade. No. 1 RUSSIAN OIL unchanged at £17 15s. per ton, less 2½ per cent.

#### Turkish Hazelnuts

REPORTS from Constantinople state that an excellent crop of hazelnuts was produced last year, the total yield for the whole of Turkey being estimated at 45,000,000 okes, approximately 58,000 tons.

#### Belgian Valerian Root

In view of the rumours prevalent in regard to the market position of Belgian valerian, the following authoritative statement, based on information supplied by one of the leading Belgian exporters, is of interest:—"We have entered the new campaign absolutely bare of stock of the old crop. The last lb. of goods has been eagerly searched for and there is nothing now left in hands of cultivators or jobbers. The market opened in September at the equivalent of 100s. per cwt. c.i.f., immediate deliveries, and any offers were readily taken up by the consumers. However, a few speculators offered forward at prices as low as 55s. to 60s. for December-January shipment, and immediately their order books were full up with several wagonloads of goods as well for the Hamburg, Paris, Marseilles and New York markets. These offers were made in the belief that the crop would be large. This point excited much discussion, and the majority believed that the crop was, in fact, short. Immediately after these sales were made blank, there was a decline in the opening prices, which fell back to as low as 70s. per cwt., but this did not last more than a few days, because these low prices attracted the keen business man, who commenced buying his annual needs. As soon as this buying started, the market steadily rose every week until it seemed to be at a standstill at about 100s. per cwt. At this figure speculators and ordinary consumers marked time, but after several weeks of total absence of business there was not the slightest sign of weakness, and the time arrived when speculators would have to fulfill their contracts. One of them got suddenly ahead and bought up all he could obtain at the prices of 110s. to 120s. per cwt., and it was then soon proved that the crop was very short. In fact, cultivators had only collected about 60 per cent. of the quantity they usually did and the market resisted strongly. Most of the forward cheap contracts had been made with Hamburg jobbers who had resold the goods. When the time of delivery arrived the original sellers had to default, and when this news arrived on the Hamburg market there was a mild panic and the small offerings were picked up at hourly increased prices until these reached the equivalent of 250s. per cwt. At that figure there are buyers to-day for several tons, whereas the goods are absolutely non-existent in the cultivation centre. Only a few jobbers succeeded in keeping small stocks, for which they ask fancy prices to-day. A pre-war normal crop was estimated to be 300 tons, whereas the cultivation after the war never reached that figure. On an average only 150 tons per annum are now produced, and it will be necessary to increase considerably the actual acreage under cultivation to meet the world needs in future."

#### Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday:—

Place	Method of Quoting	Par of Exchange	February 3	February 10
Amsterdam	Fl. to £	12.107	12.12½—12.12½	12.13½—12.13½
Berlin	M. to £	20.43	20.42½—20.43½	20.42—20.43
Brussels	Fr. to £	25.22½	106.95—107.00	106.95—107.00
Bulgaria	Lev. to £	25.22½	23.88—23.91	685—695
Calcutta	Per rup.	24d.	18½d.—18½d.	18½d.—18½d.
Constantinople	Pst. to £	110	915—930	920—935
Copenhagen	Kr. to £	18.159	—	19.65—19.67
Greece	Dr. to £	25.22½	338—340	335—339
Hong Kong	T.t. \$	—	28½d.—29½d.	28½d.—29½d.
Italy	Lire to £	25.22½	121.00—121.10	120.45—120.55
Kobe	Yen	24.58d.	22½d.—22½d.	22½d.—22½d.
Lisbon	Escu.	53d.	2½d.—2½d.	2½d.—2½d.
Madrid	Pes. to £	25.22½	34.41—34.43	34.52—34.54
Montreal	\$ to £	4.86½	4.87½—4.87½	4.88½—4.88½
New York	\$ to £	4.86½	4.86½—4.86½	4.86½—4.86½
Oslo	Kr. to £	18.159	23.88—23.91	23.87—23.90
Paris	Fr. to £	25.22½	129.30—129.35	132.15—132.25
Singapore	Per dol.	—	28½d.—28½d.	28½d.—28½d.
Stockholm	Kr. to £	18.159	—	18.15—18.16
Switzerland	Fr. to £	25.22½	25.22½—25.23	25.25—25.26
Vienna	Sh. to £	24.02	34.55—34.60	34.52—34.57
Warsaw	Zloty to £	25.22½	35—37	35—37





Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

### The Working of the P.A.T.A.

SIR,—Your correspondent "An Apostate" (*C. & D.*, February 6, p. 208) raises the question of the price manufacturers supply goods at to their employees. There is a much larger question that should engage the attention of the P.A.T.A.—viz., the formation of so-called clubs in the offices of banks and insurance companies for the purpose of supplying goods to employees at absolutely manufacturers' prices, and thus depriving retailers of the business and profit. Will the P.A.T.A. request these clubs to sign the new agreements; and if these are not signed, will the manufacturers discontinue the supplies?—Yours truly,

LONDINENSIS (8/2).

SIR,—“A Convert” (*C. & D.*, January 23, p. 140) says that if price protection ceased there would only be a small increase in cutting; let him consider the retail prices of non-protected proprietaries and consider again. He also states that hairdressers require a fair profit and chemists have little to fear from them. Of course they require a profit, but it is the chemist's goods they cut in order to receive his customers as well as their own; the price of a hair-cut, shave, or shingle is not cut by rival hairdressers, but a chemist will very often cut his neighbour's dispensing charges. And the hairdressers are not worried with people calling to see whether the maiden's locks have been bobbed to the exact length demanded, or whether they keep their bay rum and cantharides lotion in a locked cupboard. If the hairdressers were to put a series of toilet articles on the market, one more or less among the multitude would make little difference.—Faithfully yours,

SHAMPOO (5/2).

### Labelling of Poisons Order

SIR,—As time passes it becomes more evident that the new Labelling of Poisons Order is a retrograde step of a deplorable kind so far as retail chemists are concerned. The public safety has been in no increasing danger by accidents, nor have suicides been increasing; on the contrary, the growing requirements of the pharmaceutical examinations have insured a highly-trained class of pharmacists to handle drugs and drug buyers. In these circumstances it is a piece of sheer folly to require chemists to put the name and quantity of active drugs upon each label, and to insist upon the word “Poison” being put on any mixture intended for internal use. If a new Order were necessary, it ought to be that the word “Poison” do not appear on any medicine for internal use, but, instead, a caution not to exceed the prescribed dose. The fact that, for instance, Hamilton's pills must now be labelled “Poison,” just like lysol, shows that the position has become intolerable, and that we are being governed by people who do not know our business.

Yours, etc.,

SCOTIA (22/1).

SIR,—“Xrayser III” agrees with your suggestion that it would indeed seem absurd to label as “poison” the homœopathic dilutions, but adds, “Who is to say that we may not yet be driven to this extreme?” We think this is a most remote contingency. Many years ago the writer had a conversation on this subject with the late Mr. Michael Carteighe, then President of the Pharmaceutical Society. The question was put to him: “Are we in any way liable to prosecution for selling our ordinary No. 3 dilutions of such medicines as aconite, belladonna, nux vomica, etc., without labelling them ‘Poison’?” Mr. Carteighe replied: “Unless there is definitely a poisonous dose in the small quantity sold and we could prove this by analysis, we could not think of prosecuting, as this would place us in a most unreasonable position.” We have it on excellent authority that

this rule still holds good, and that these medicines are not affected by the new order, because they come under the legal principle of “de minimis non curat lex.” Homœopathic medicines do not owe all their curative value to the amount of drug material they contain, but in great measure to the dynamic force given to that material by the succussion and trituration employed in their manufacture. Hence a homœopathic medicine may be very powerful (curatively), but perfectly harmless (toxically). Chemists may rest assured that they are quite safe in selling these medicines without a “poison” label. Any of our stronger preparations which do require the word “poison” will be appropriately labelled.

Yours faithfully,

LEATH & ROSS.

London, N.W.6.

### Loss on Insurance Dispensing

SIR,—If I read Mr. A. W. Cornish's letter (*C. & D.*, February 6, p. 207) correctly, he maintains that a man should be able single-handed to do (I will not say dispense) forty or fifty Insurance scripts daily in addition to his usual business. This kind of thing may be done in the case of emergency—I have tackled it myself during holidays or illness of staff; but if any men are seriously trying to cope with it regularly year in and year out, I can only say that it fully explains the reports we read of medicines containing 30 or 40 per cent. surplus or deficit of some ingredient, and accounts for the stringency with which the Sale of Food and Drugs Acts are applied, to the annoyance and inconvenience of those pharmacists who really dispense. Further, such statements can only lead the officials at the Ministry of Health to conclude that dispensing is the mere stopping of a few drugs into bottles at the rate of a dozen or two an hour, with prejudicial results when a betterment of terms is sought for. But when Mr. Cornish speaks of a man getting just sufficient work to prevent him attending to his ordinary business, he is on safer ground, for that is just what twenty or thirty scripts a day will do.—Faithfully yours,

SEC. ART. (8/2).

SIR,—“Jay Mack” (*C. & D.*, February 6, p. 207) advances the old argument about the doctors being ready and eager to take on the Insurance dispensing; but pharmacists have heard this so often at meetings and elsewhere that they are inclined to be rather sceptical. I have made it a point to ask several panel doctors, when an opening has occurred in conversation, if they would like the dispensing as well as the prescribing, and the answer has invariably been in the negative. As it is, although they do not refuse the capitation fees, many medical men look on panel patients as a nuisance. “Jay Mack” further says that insured patients receive good attention; I wonder whether he ever takes in any scripts for lotions, dressings, etc., with the letters “m.d.u.” at the foot, the customer explaining that the prescriber “never said anything—just gave me this piece of paper to take to the chemist.” This is not my idea of good medical attention. I agree with “Jay Mack,” however, that there is a great waste of drugs. Mist. bismuthi is a glaring example, especially so when after a few doses the patient has to go to the doctor again, and arrives in the pharmacy with a new script for mist. cascarae and a bottle containing nine or ten ounces of unused mist. bismuthi, remarking, “Will you throw that away, as the doctor has changed the medicine?” Economy in the right place would enable the Government to pay the pharmacist a proper fee, and then to save money on the present expenditure.—Yours faithfully,

BISMUTHINE (9/2).

### The Poison Problem

SIR,—The problem of accidental poisoning, so far as my experience goes—nearly sixty years—has never been considered from the proper standpoint. This morning I received a circular letter from my local Association calling attention to the importance of observing the regulations for the keeping of poisons, etc. This is, of course, a mere reproduction of many other circulars, useful no doubt to the pharmacist, but how much more to the point if addressed to the householder. The accidents, so-called,



involving inquests and the attentions of the police do not occur on our premises and by our connivance and knowledge, but on the private premises of the householder and purchaser, to whom hints and instructions as to the necessity for care in storage and handling are long overdue. The problem would be well on the way to solution if the law were altered so as to embrace the purchaser and provide penalties, fines and imprisonment for misuse or carelessness. Any purchaser should be made to understand that the stuff is to be kept in the original and distinctly labelled container, and is not to be decanted into bottles or containers associated with domestic use, in any circumstances. As to carbolic acid, if kept in the bottle as sold by chemists, no person should make any mistake about this, even in the dark.—Yours, etc.,

VETERAN (19/1).

### British versus Foreign Goods

SIR,—Most of us are convinced by Mr. Marns's letter of the 90 per cent. British character of the concern referred to by Mr. Kemp; the remaining 10 per cent. probably consists of the necessary "ginger." All will agree that the U.S.A. is the home of big business, and that, in comparison, we are but little children weak. Yet no one can deny that British goods are as good as good goods can be, and a strong push only is necessary to drive home that fact. Already prospects are brightening; dividends show a steady improvement; brewery, cinema, and the shares of other productive concerns are soaring; labour costs, happily, are falling, and with lower wages the labourer must be satisfied with less champagne and produce more goods; so that we are once again on the high road to prosperity. We are somewhat behind the U.S.A. in the art of advertising, but with expert coaching from "over the other side" we may soon draw level. Some of the latest advertising stunts, however, are not calculated to improve the prestige of British pharmacy. The atmosphere of the one-cent sale store is rather incompatible with that of a high-brow "evening meeting," and those who can combine the two are craftsmen indeed! When we have attained an up-to-the-minute standard of business efficiency, we may expect a prelector in his oration at the grand opening of a session to discourse on the issue of free beauty-wave appliances as a stimulus to the sales of phenyldimethyliso pyrazolone.

Yours truly,

R. H. L. (16/11).

### Dutch Drops

SIR,—In my boyhood—say sixty years ago—the application of Dutch Drops to our cut fingers was the usual procedure with us when necessity arose. We had quite a large bottle—in all probability the genuine article, for the reason that Dutch vessels (bringing the round cheeses of Edam) were constantly in the river near our domicile, and no doubt had supplies for their own use. Although rather unpleasantly odouriferous, it was of great value for our purposes. Bleeding was promptly stopped, and there were no complications. I have always thought it curious that although apprenticed in the town I have no recollection of meeting with this article in the shop, nor of seeing it used anywhere apart from my own home. [There is a well-authenticated tradition that in those days skippers sold Dutch Drops to East Anglian pharmacists.—EDITOR.] Of course, I have many times sold Dutch Drops since, but rather for inward than outward application, lumbago to wit.—Yours, etc.,

J. P. N. (10/2).

### "Last Lappers"

SIR,—Referring to the letter headed "Last Lappers" (*C. & D.*, January 16, p. 104), the writer would, no doubt, like to hear the other side. The public did not grasp the idea for the first three nights, during the week before Christmas, that they could buy anything after the ordinary closing-hours. Being so accustomed to seeing shop windows lighted up at night (even some chemists do it) and the shop doors locked, the people naturally concluded: "Nothing doing." The very few who did venture inside apologised for doing so, and asked if they might be allowed to buy so-and-so. Not all pharmacists are grumbling at long hours, but they do bitterly complain of the everlasting increase in taxation, and the silly rules and regulations in restraint of trade foisted upon

them, with the promise of more. In consequence, as business men they fully realise the necessity of seizing the opportunity of getting more trade in a perfectly legal and legitimate matter. During one of the first nights mentioned above, a young gentleman was carried into my pharmacy, behind the dispensing screen, and dumped there, and there he remained for nearly three hours. Suffering from severe alcoholic poisoning, he was the biggest social problem of forty years' experience. The irony was that a banquet had been arranged in his honour; his friends knew not of his whereabouts, and, needless to say, the chief guest did not participate in the dinner. By 10.45 the customer was himself again, looking a trifle pale, with his subconscious mind working rapidly. Next morning he reappeared as promised, as well as ever, not even a headache; a hearty handshake, many thanks and apologies, a well-intended voluntary promise of "Never again"; and last, but not least, a crisp new banknote was my reward for being a "Last Lapper," and keeping open shop on a dark and dismal night.—I am, etc.,

CARPE DIEM (18/1).

## Dispensing Difficulties and Notes

### Precipitates in Eye Lotions

SIR,—I am confused as to the correct mode of sending out, and the reactions occurring in the following eye-lotion, and should appreciate your opinion:—

Zinci sulph.	...	...	...	gr viij.
Ac. boric	...	...	...	gr. xl.
Pulv. boracis	...	...	...	gr. xl.
Aq. rosae	...	...	...	ad 5viij.

Yours truly,

D. G. B. (25/1).

[It is not quite easy to decide whether this collyrium should be filtered clear or dispensed with precipitate. While on general principles it is well not to employ insoluble matter in application to eyes, there is not likely to be a harmful result from the use of a lotion containing a finely divided amorphous precipitate, such as produced in this one. The insoluble matter may even possess desirable medicinal properties, being mainly zinc borate as a result of reaction between the zinc sulphate and borax. A somewhat analogous example is presented in the much-used and greatly prized skin lotion prepared by dissolving zinc sulphate and sulphurated potash together, zinc sulphide in form of very light precipitate being produced and constituting the active ingredient. It is a suitable case for having a talk on the subject with the prescriber.]

### Solubility of Sodii Bicarbonas

SIR,—On making the following mixture in Winchester-quart quantities I find the sodium bicarbonate cakes after standing a week or so. Is this due to the recent frosty weather, or is there some reaction between alkali and acid?

Sodii bicarb.	...	...	...	5vj. ʒij.
Ac. hydrocyan.	dil.	...	...	ʒi.
Inf. gent. co.	...	...	...	ad 5x.

Yours faithfully,

MEDICO (15/12).

[The cause of the precipitate is the strength of the mixture in sodium bicarbonate. It is too near the saturation point. The pharmacopœial statement of the solubility of sodium bicarbonate is 43 grains to a fluid ounce of distilled water. Your mixture contains 40 grains to a fluid ounce, with other things besides water. If you store the mixture at a steady temperature of 60° F. or over there will be a mere trace of deposit. When the temperature falls in the pharmacy to 48° F. or even 45° F., precipitation to a considerable extent is inevitable. Infusion made from a concentrate accentuates the trouble owing to the small quantity of alcohol present. The dilute hydrocyanic acid may be discounted as a disturbing factor. You mention that your precipitate "cakes." That we have obtained is always free. It may be that you have used tap water containing a little "hardness."]



## Legal Queries

*A. G. N.* (2/2).—The preparation should be labelled: "Contains tr. chlorof. et morph. B.P. 1 in 26.6 [or 3.75 per cent.]-Poison."

*W. A. S.* (6/2).—An unqualified person cannot legally carry on the business of a chemist and druggist, even if employing a qualified person. By forming a limited company and appointing the qualified person as superintendent the difficulty can be overcome.

*S. & Co.* (8/2).—Preparations of lobelia being scheduled poisons, the proportion of the poison must be stated on the label with the word "Poison." The wording of the label you send would not render the preparation liable to medicine-stamp duty.

*E. B.* (8/2).—It is illegal to carry on the business of a chemist and druggist in the manner you indicate. It would be an offence under the Dangerous Drugs Acts to be in possession of "dangerous" drugs, and under the Pharmacy Acts to sell scheduled poisons.

*J. M. & S.* (18/1).—There is no change in the conditions of sale of ammonia solution. The *C. & D. Diary*, 1926, gives the Poisons Schedules as at present in force, and the *C. & D. Poisons Card No. 2* gives the details of the sale of most articles that are scheduled as poisons.

*T. D. Co.* (5/2).—Chloroform *per se* is a Part II poison, and so are preparations or admixtures containing more than 20 per cent., and the label must declare the percentage of the poison. All preparations or admixtures below this strength are not scheduled poisons, and it is not necessary to make a declaration of proportion or to label the article "Poison."

*Areca* (3/2).—Areca nuts can hardly be regarded as a scheduled poison, as the dose is gr. xv.—3j. Officially, the drug is defined as containing a poisonous alkaloid, but the quantity present is so small that the practical line is to treat it as non-poisonous on the same principle as vin. ipecac. The concentrations, such as liquid extracts, are, however, usually labelled poison.

*F. L.* (25/1).—The label you send is not liable to medicine-stamp duty, because it is not recommended for any ailment. It may consequently be sold by persons who do not hold a patent-medicine licence. The design on the label can be registered (see *C. & D. Diary*, 1926). You might alternatively apply for a trade-mark, but we cannot say whether the Registrar will accept the mark.

*C. F. C.* (26/1) is employed as resident manager to a pharmacist at a fixed weekly salary and a commission on gross sales, and under his contract of employment he is allowed to reside rent and rates free on the premises. He wishes to know if in sending in his return for income-tax he is to include in his income anything for the value of the dwelling-rooms which he occupies, and which have an estimated value of £1 per week. [No. This is not part of "C. F. C.'s" assessable income. It is understood that he occupies only as employee, is not at liberty to let the premises to a third person, and would have to vacate them on ceasing to hold his employment.]

*J. W. D.* (29/1).—(1) The Pharmacy Act 1868, Section 1, limits the "sale of poisons" to pharmaceutical chemists and chemists and druggists. Section 17 provides for manufacturers and wholesale dealing. The Pharmaceutical Society regards mail order sales of poisons as coming within this definition, and invariably takes action when cases are brought before them. (2) There is no legal requirements as to free samples. They are not regarded as sales. In the case of the remedy you mention there could be no difficulties arising.

*M. A. J.* (2/2).—(1) The Labelling of Poisons Order requires all preparations to show on the label the name of the poison and the proportion thereof, except in the case of B.P. and B.P.C. preparations, which are exempt from the Order in so far as the name of the poison is concerned. It follows that aqueous tinctures containing a poison must show the strength on the label. (2) There is an element of danger in associating the name "paregoric" with an article free of opium, even though it is labelled "paregoric substitute."

*A. W. G.* (4/2).—Unless there is an agreement to the contrary, the custom of the drug trade is a month's notice by assistant or master. This is independent of the frequency of payment.

*D. W. F.* (6/2).—The wording of the Regulation dealing with giving of prescriptions for "dangerous" drugs is: "The prescription must be in writing, must be dated and signed by the medical practitioner," etc. If anyone else writes out the prescription for the doctor, and the doctor signs it, it is the doctor's prescription. In all these cases, providing the necessary details are given and the doctor signs the prescription, he assumes responsibility and the prescriptions are in order. Similarly a typewritten prescription duly signed complies with the Regulation.

*S. & Co.* (3/2).—The concession in the Labelling of Poisons Order states: "In the case of any preparation of B.P. or B.P.C. . . it shall be sufficient" to label by "its name, or synonym or abbreviated name" . . . "with the addition of the letters B.P. or B.P.C. as the case may be." The labelling in the cases you mention may be: "Paregoric B.P.—Poison," or "Tr. camph. co. B.P.—Poison," or "Laudanum B.P.—Poison," or "Tr. opii. B.P.—Poison." It ought not to be forgotten that it is unwise to strain this concession, which is possibly *ultra vires*, but being officially recognised it should be strictly adhered to.

*H. B. J.* (8/2).—A man died, this year, leaving, amongst other property, three houses, one of which is in his name alone and the other two in the joint names of himself and his wife. He is survived by his wife, two sons and three daughters. How is the estate to be divided, and is it possible for the widow by her will to dispose of the two houses in the deeds of which her name appears? [Under the new legislation, the widow is entitled to £1,000 and all the personal effects absolutely. The remainder of the property will have to be apportioned. One-half will go to the children in equal shares; the other half will go to the widow for her life and afterwards to the children. As to the two houses, it is impossible to express a definite opinion without seeing the deeds. It is probable, however, that they belong to the widow by right of survivorship and that she can devise them by will. We strongly advise the family to consult a solicitor.]

*B. G.* (29/1), referring to the new methylated spirit regulations recently published in the *C. & D.*, says he is not clear as to what is meant by "veterinary purposes." He finds that some veterinary surgeons of his acquaintance think they are entitled to obtain industrial methylated spirits for use in making tinctures, etc., for internal administration to animals, while he is not satisfied that the spirits can be so used. ["B. G." is right. The Statutory Order does not allow the supply of the spirits for such a purpose as used in tinctures. This is clear from Regulation 10 (1) (b), which lays down that the order from the veterinary surgeon "must state the purpose for which the spirits are intended to be used, which must be one of the purposes authorised by this regulation," and the only purposes authorised by the regulation, so far as veterinary surgeons are concerned, are given in 10 (1) (a) (11) as "an application to the skin of animals, or as an agent in sterilising instruments."]

*F. & Co.* (2/2) asks whether his client's annual subscription of £1 to the *C. & D.* ought not to be allowed as a trade expense deduction in his return of profits for income-tax purposes. The local inspector of taxes is not disposed to grant the claim. [In the case of a chemist in actual business we think the claim that this is a trade expense which ought to be allowed is one which might properly be made; but whether it is one which will succeed is uncertain, because of the indefinite state of the law as to deductions from profits for income-tax purposes. The rule of law is that an expense is not allowable unless it has been wholly and exclusively incurred for the purposes of the business from which the income which is being taxed is derived. But payment in respect of current price lists, stocks of chemicals, etc., such as the *C. & D.* furnishes, might be claimed to be for information enabling the income or some portion of it to be made.]



## Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

*W. J. T.* (27/12).—**MANUFACTURE OF IODINE.**—The best account of the manufacture of iodine from seaweed is that given in Thorpe's "Dictionary of Applied Chemistry," which was written originally by Mr. E. C. C. Stanford. There have also been pamphlets on the utilisation of seaweed, but, as you are probably aware, iodine from Chilian saltpetre is a by-product that can be obtained in large quantity if required.

*F. B.* (18/1).—Steaming hard gut strings will soften them, and when they have dried again a little solution of castor oil in alcohol should be applied.

*A. E. K.* (18/1).—**GLYCERIN, LEMON AND HONEY MIXTURE:**—

Succ. limonis,  
Glycerini,  
Mel. depur. ... aa. p.aeq.

Some use syrup. limonis in place of the succus.

*A. C. M.* (18/1).—**ESSENCE OF CINNAMON AND QUININE, P.F. 1:**—

Ol. cinnam. ver. ... m.vj.  
Spt. rect. ... ʒiij.  
Tr. quin. amm. ... ad ʒj.

*K. & S.* (19/1).—**LIN. UNIVERSALE.**—This is lin. tereb. acet. B.P., or in the North of England, as a correspondent wrote in the *C. & D.*, July 11, 1925, p. 76:—

Lin. saponis meth. ... ʒiiss.  
Tr. opii ... ʒlxiv.  
Liq. amm. fort. ... ʒiij.

*H. J.* (19/1).—**ADVERTISING EXPENSES.**—It is difficult to lay down any percentage for advertising in the retail trade as it bears a direct relation to the turnover. Without knowledge of what the latter is, it is impossible to do anything more than say it may be 3 to 10 per cent. The last figure is only possible if the turnover is large enough to warrant it.

*A. B.* (20/1).—**GINGER-WINE ESSENCE:**—

Gingerin ... ʒviij.  
Capsicin ... ʒiiss.  
Glycerin ... ʒviij.  
Syrup ... ʒviij.  
Caramel ... ʒiv.  
Tartaric acid ... ʒvj.  
Water to ... ʒlxixij.

Mix.

**Directions.**—Dissolve 3 lb. of loaf-sugar in 3 pints of water by boiling, and make up to 1 gallon with water. To this add 4 oz. of the essence.

The essence contains glycerin as preservative. (See also *C. & D.*, October 31, 1925, p. 658.)

*S. C.* (20/1).—We examined a sample of Setting Lotion for the hair some time ago, and found it to consist of mucilage acacia and sodium carbonate, the alkali being used to promote waviness. If required for "setting" alone we should think that tragacanth solution as used for men's hair (3 grains to the ounce) would be suitable.

*H. K. W.* (20/1).—**IODO-GLYCEROLE.**—Dr. E. S. Talbot devised the dental preparation Iodo-glycerole as a germ destroyer. His formula is:

Zinc iodide ... 15  
Water ... 10  
Iodin ... 25  
Glycerin ... 50

There are other formulas containing potassium iodide, but the above is the one used by Talbot.

*W. S.* (21/1).—We cannot say for certain what is the composition of the pigeon's food given before flying. An analysis, the details of which were published in the *C. & D.*, March 28, 1925, p. 483, left the matter in doubt.

*E. M.* (21/1).—**SHAVING SOAP.**—The best lather for a shaving soap is obtained from a base made with coconut oil soap. The method of making was given in the *C. & D.*, January 7, 1922, p. 12, or in the *C. & D. Price*

List Formulary. It is sometimes suggested to use in the soap a small proportion of powdered gelatin or tragacanth, with the idea of stiffening the lather, but we believe that the best makes depend upon the selection of the ingredients and the adjustment of the alkalinity.

*T. S.* (22/1).—We think you will find that the cloudy or iridescent coating you obtain with the cellaloid varnish is due to the use of an unsuitable solvent. If the cellaloid is dissolved in acetone and then diluted to 2 per cent. strength by the addition of hexaline acetate a different result will be obtained.

*L. A. E. K.* (22/1).—"ALL FOURS."—The formula given in the *C. & D. Price List Formulary* is as follows:

Ol. anisi,  
Ol. menth. pip. ... aa. ʒj.  
Tr. opii ... ʒj.  
Tr. camph. co. ... ʒij.  
Aq. ... ad ʒviij.

This should be labelled: "Contains tr. opii B.P. 1/8, and tr. camph. co. B.P. 1/4.—Poison."

*W. A. K.* (22/1).—**BOOK-KEEPING FOR CHEMISTS.**—The best system is that printed in the *C. & D.*, January 3, 1925, p. 33.

*Bruni* (23/1).—**CHARGE FOR DISPENSING.**—The prescription you send, priced on the *C. & D. Costing System*, is as follows:—

Calc. iod.	...	...	...	3iss.	13
Tr. iodi	...	...	...	ʒss.	1
Syr. zingib.	...	...	ad	ʒiv.	12
Container	...	...	...	...	2
Dispensing fee	...	...	...	...	8
					36d.

Charge, 3s.

*A. H. D.* (24/1).—**PRELIMINARY EXAMINATION.**—The certificate of the Junior Oxford Local examination is accepted by the Pharmaceutical Society until February 1, 1927. The 4,000 hours count only from the time of registration as a student.

*J. C., Ltd.* (25/1).—The inscription on the old pharmacy pot is intended for ung. comitisse, Countess's ointment, formerly official in the London Pharmacopœia. It is an ointment containing oak and chestnut bark and similar astringent components.

## Retrospect of Fifty Years Ago

Reprinted from  
"The Chemist and Druggist," February 15, 1876

Johannes Rudolphus Glauberus

Part of an Article by Joseph Ince.

Dr. Robert Godfrey was a physician who entertained a high notion of his own abilities, a sentiment which was strengthened by a profound contempt for those of his contemporaries. In 1674 he wrote a little book filled with virulent invective, called "Various Injuries and Abuses in Chymical and Galenical Physick, committed both by Physicians and Apothecaries, detected." In the preface he sets forth that his discourse saw not the press through the importunity of friends, nor was its appearance influenced by any of the usual inducements which lure the inexperienced into print; but that it resulted from a wish to speak his mind and to administer some sharp reproof. His most dear father, he states apologetically, was killed *secundum artem* through the deceit of the physician and apothecary, by taking a "preventive purge"; and the author himself also in his younger years had had his vitals much weakened by poisonous and debilitating methods. In the twentieth year of his age, Robert Godfrey became intimately acquainted with a true-hearted chemical physician; he *tabled* in the doctor's house, and gained so much knowledge of medicine as to prevent himself from being snatched away by an untimely death as was his honoured parent. . . . Various conflicting opinions respecting this chemist have been entertained. His name will be handed down to remote posterity in inseparable connection with the sodium sulphate salt, which was the Natron Vitriolatum, P.L., 1787; but was officially honoured as the Sal Catharticus Glauberi, P.L., 1745. That title is yet recognised in continental pharmacy, and is still familiar in English domestic nomenclature.





[Commenced C. & D., July 5, 1924]

**Elaterin as a Poison.**—The active principle of elaterium is not an alkaloid, and consequently does not come within any specification of the Poisons Schedule. It is, however, a powerful hydrogogue cathartic, and unless used with caution produces distressing results. In cases of poisoning, the antidotes used are emetics, hypodermic injection of morphine, demulcent drinks, and, later, stimulants such as spt. ammon. aromat.

**Elder Flowers.**—The flowers of *Sambucus nigra* (N.O. *Caprifoliaceae*) are chiefly used in pharmacy in the fresh state for the distillation of elder flower water, but as the flowering season lasts only for about three weeks in June, the flowers are often salted, about 1 lb. of salt to 2 lb. of flowers, so as to be available for distillation at a later season. In domestic herbal medicine the dried flowers are largely used in country districts, and are sold by herbalists either in dried bunches of flowers or sifted free from flower stalks. The flowers are not easily dried of good colour. If left too late exposed to the sun before gathering, the flowers assume a brownish colour when dried, and if the flower bunches are left too long in heaps, to cause the flowers to fall off, these heaps turn black. If the inflorescence is only partly open when gathered, the flower heads have to be sifted more than once, as the flowers do not all open at the same time. The best and lightest-coloured flowers are obtained at the first sifting, when the flowers that have matured and fallen naturally are free from stalks and dried quickly in a heated atmosphere. As a rule, imported flowers have a duller yellow colour and inferior odour and are sold at a cheaper rate. The inner bark of the elder is used in homeopathic medicine and the soft pith for microscopic section cutting. The leaves of the elder are used for making unguentum viride, and the berries are extensively used for the preparation of elder wine. French and other Continental elder berries, when dried, are not liked for this purpose, as they have a more unpleasant odour and flavour, and English dried berries are preferred. Possibly this may be due to the conditions of growth, or variety, or to the presence of the berries of the dwarf elder. The flowers of *Sambucus canadensis*, Linn., the North American elder, are said to be more fragrant than those of *S. nigra*. *Sambucus Ebulus*, Linn., is often present among Continental elder berries, that species being much commoner than it is in England. The leaves of *Sambucus Ebulus* are sold by herbalists and are distinguishable by having a stipel or small leaf at the base of the leaflets, which are usually seven in number, and longer and narrower than in the *Sambucus nigra*. The plant is herbaceous, dying down every year, and spreads by underground shoots. The flowers are whiter than those of the common elder, and have red anthers. Of the common elder there are several varieties, one with cut leaves, and another with variegated leaves, and one with yellow berries. A pretty species, *Sambucus racemosus*, is cultivated in shrubberies, which flowers in March and has bright red berries, but they are so attractive to birds that their beauty is rarely seen except when cultivated close to a house. A curious fungus called jew's-ear (*Exidra auricula Judae*) grows on elder trunks in damp, shady places, of a purplish tint, but resembling in shape and softness the human ear. It receives its name from the tradition that Judas hung himself on an elder tree; but the Judas tree probably belongs rather to the tree known by that name in shrubberies (*Cercus siliquastrus*). The fungus is edible, and allied species are eaten in China.

**Electric Signs.**—An illuminated sign outside the chemist's shop, or in the window, is a useful means of

attracting the attention of passers-by. Before buying an electric sign the chemist will be wise to bear in mind that it should be devoid of any element of glare, otherwise instead of attracting it will have a repelling influence. The object of using illuminated display aids is to focus attention on the actual goods exhibited; but a sign which is too prominently displayed defeats its end in that it attracts attention to itself rather than to the goods. An unusual and distinctive form of sign is one which produces constantly changing colour effects. This sign can be used without wording to attract general attention to the window, or a suitable inscription can be placed on the glass front. A single electric light is the illuminating agent, but the apparatus can be adapted for use with oil or gas. A sign of this sort could be used with special colour effects to match the window dressing. The chief limitation with many illuminated signs is that, while they may be very effective by day or by night, they are not equally effective by both day and night. A number of them, however, have been made adaptable to publicity purposes at all hours. A particularly neat and attractive sign is one constructed of polished plate glass, on the back of which is etched any picture, design or wording desired. The design or inscription, being cut into and so protected by the glass, retains its original brilliancy indefinitely. Although this sign throws up in strong relief the retailer's message, it can be placed well forward in the window, as it does not hide any of the articles exhibited. The plate glass can be easily removed at will, and replaced by another bearing a different inscription. This sign can also be used as a source of illumination. For chemists whose shops are lighted by gas there are a number of illuminated signs available. One of the latest types of these has a device which automatically alters the ordinary gas supply into an intermittent one. The running costs of this are low. A sign in the form of a V has been produced for use outside the shop. This probably reaches a wider area of vision than the straight hanging sign, as it is seen plainly by people in the distance on the other side of the road. Such signs as these are valuable to retail chemists who carry on their business in side streets; a sign of this nature, which can be easily seen from several directions, should provide a means of attracting prospective customers from the principal streets.

**Electric Units.**—At the International Electrical Congress in 1893 definitions of the principal electrical units were adopted. The fundamental electric units are as follows: The Ohm is the unit of resistance and has a value of  $10^9$  in terms of the centimetre and the second; the Ampere is the unit of current strength and has a value of  $10^{-1}$  in terms of the c. g. s.; the Volt is the unit of electromotive force and has a value of  $10^8$  in terms of c. g. s.; the Watt is the unit of power and has a value of  $10^7$  in terms of the c. g. s. In order to represent these fundamental units practically, the Conference recommended the adoption of the International Units as follows: *International Ohm*: The resistance offered to an unvarying electric current by a column of mercury at the temperature of melting ice, 144,521 grams in mass, of a cross-sectional area, and of a length of 103,300 centimetres. *International Ampere*: The unvarying electric current, which, when passed through a specified solution of silver nitrate under certain conditions deposits silver at the rate of 0.00111800 gram per second. *International Volt*: The electrical pressure, which, when steadily applied to a conductor, the resistance of which is one international ohm, will produce a current of one international ampere. *International Watt*: The energy expended per second by an unvarying electric current of one international ampere, under an electric pressure of one international volt. Based on these, the following international units are readily defined: The *Joule*, equivalent to  $10^7$  c.g.s. units, is the work done when one ampere flows for one second, under an electric pressure of one volt; the *Coulomb*, equivalent to  $10^{-1}$  c.g.s. units, is the quantity of electricity transferred by a current of one ampere in one second; the *Farad*, equivalent to  $10^{-9}$  c.g.s. units, is the capacity of a condenser which is charged to a potential of one volt by one coulomb; the *Henry*, equivalent to  $10^9$  c.g.s. units, is the inductance of a circuit in which an electromotive force (E.M.F.) of one volt is established by a current varying at the rate of one ampere per second. At the Inter-



## The C.&D. Commercial Compendium

national Convention of Electrical Engineers in 1960 the following additional units were adopted: The *Maxwell*, equivalent to one c.g.s. line of force, is the unit of magnetic flux; the *Gauss*, equivalent to one Maxwell per square centimetre, is the unit of magnetic flux density.

**Electrolytes** are substances which in solution in water can be decomposed or electrolysed by the passage of an electrical current. Inorganic methods of analysis depend upon salts, bases, and acids being electrolysed in solution and forming precipitates or coloured solutions by redistribution of ions. Chemical substances which are electrolytes undergo partial or complete dissociation into ions when dissolved in water. Thus the Farad (F) of electricity (96,540 coulombs) will liberate from an electrolytic solution 1 gram of hydrogen ( $H^+$ ), 108 grams of silver ( $Ag^+$ ), 63 grams of cuprous copper ( $Cu^+$ ), and 31.5 grams of cupric copper ( $Cu^{++}$ ). It is the migration of these ions that results in the transference of electricity in an external conducting circuit—which property is used in the construction of electric cells, batteries, and accumulators. The positively charged ions called *cations* are attracted to the negative electrode (or cathode), while the negative *anions* go to the positive anode. The amount of different elements set free by the Farad of electrical current (96,540 coulombs) is called its electrochemical equivalent. This is proportional to the chemical equivalent in that it varies according to whether the ion bears a single, double or multiple charge.

**Electron** is now regarded as the ultimate indivisible unit (or atom) of electricity. It is a constituent of all matter which becomes *electrically charged by loss or gain of electrons*—i.e., a negatively charged body has a surplus of one or more electrons, while a positively charged body is lacking in electrons. Each electron carries a definite charge of electricity (designated by  $e$  and equal to  $4.774 \times 10^{-10}$  electrostatic units or  $1.591 \times 10^{-20}$  electromagnet units). Its mass (at rest) is  $8.995 \times 10^{-28}$  grams. In the newer electron chemistry all reactions can be represented by interchange of valency electrons or electrons entering into the outermost orbit of activated atoms. Thus hydrogenation (or reduction) represents gain of an electron, and oxidation loss of an electron by the element in question. Neutralisation corresponds to union of atoms with defect and surplus of electrons. The electron which is identified with the negative unit of electricity is the most fundamental thing in electrical as well as chemical science. Any motion of electrons through space or through a conductor constitutes a current of electricity.

**Elegit, Writ of.**—A method of enforcing payment of a judgment debt which is rarely used is by applying to the Court for a writ of elegit. This process is available only when judgment for payment of a sum of money has actually been obtained and the debtor is possessed of lands. The writ commands the sheriff to deliver to the plaintiff, at a reasonable price, all the defendant's lands until the judgment debt and costs have been paid. The sheriff summons a jury, who value the land and deliver it to the plaintiff at the ascertained price. The plaintiff then becomes "tenant by elegit," and may remain in possession until the amount due to him has been paid, either out of the rents and profits of the land, or otherwise. Alternatively, the plaintiff may, with the permission of the Court, sell the land and recoup himself out of the proceeds, accounting to the debtor for the balance. When the debt has been satisfied, the debtor is entitled to possession of his land, once more, assuming that it has not been sold.

**"Elementary Dispensing Practice."**—Written in 1903 by the late Joseph Ince, Ph.C., and based on articles contributed by Mr. Ince to THE CHEMIST AND DRUGGIST. The book embodies a series of exercises for students, and accordingly is conceived from a different point of view from "The Art of Dispensing." Published at the offices of the C. & D., but now out of print. Copies can generally be obtained by advertising in the Coloured Supplement.

**Elemi.**—A soft oleoresin, derived chiefly from *Canarium luzonicum*. Gray (N.O. *Burseracea*), about four to five kilos per year being yielded by a mature tree. In odour it resembles a mixture of fennel and mace, and it has a rather bitter taste and spicy flavour. It is imported under the name of Manila elemi, mostly in tins packed in cases. Under the microscope it is seen to contain acicular crystals in abundance. It yields 20 to 30 per cent. of volatile oil of pleasant odour. It has long been used in the form of a stimulating ointment as an article to be kept in the medicine chests of ships for the treatment of ulcers, etc., but otherwise is rarely used in pharmacy. Of the inferior or less clean elemi a use is found in the preparation of printers' ink. Various oleoresins resembling or allied to elemi have at times appeared in commerce under the name elemi. The African elemi of the older writers appears to have been an oleo-gum resin derived from *Boswellia Ferreana*. Birdw., closely allied to olibanum. It was also regarded as a kind of Tacamahaca resin. It is used in the East as a masticatory, like mastic. Mexican, Brazilian, and Mauritius elemis are mentioned in Pharmacographia, but although somewhat resembling elemi in odour, none of them could be confused with Manila elemi. Tschirch enumerates over forty kinds of elemi, chiefly belonging to the nat. ord. *Burseracea*, but which cannot be regarded as commercial articles in this country. One of the most recent is *Nauli* gum, which somewhat resembles Manila elemi in appearance. It is imported from the Solomon Islands, but is distinguished by its anise-like odour. It yields about 81 per cent. of resin, and 10 per cent. of volatile oil, which has found a place in perfumery. It is imported in rolls surrounded with monocotyledonous leaves. Elemi gum is usually forwarded to London on consignment and sorted for quality and sampled on arrival.

**Elm Bark** was official in the B.P., 1864 and 1867. It is yielded by *Ulmus campestris*, Linn. (N.O. *Urticacea*). It was in vogue as a mild mucilaginous astringent, but is now rarely used. Slippery elm bark, *Ulmus fulva*, Mich., has taken its place, and is now widely used, especially by herbalists. The tree yielding it is about thirty feet high, is a native of the Northern and Central United States, and is extensively collected in Michigan. The inner bark is the part used; it is laminated, tough and fibrous, and is not easily broken transversely, although not more than  $\frac{1}{10}$  to  $\frac{1}{8}$  inch thick. It occurs in commerce in long flat pieces two to three feet long and up to six inches wide. It has a mucilaginous taste and an odour and flavour resembling that of fenugreek. The mucilage does not dissolve, but only swells up in water. Ten grains of the powdered bark will make a thick jelly with an ounce of water. The bark is sold in loose slabs or in 5-lb. wired bundles of selected pieces. The powder is sold in the form of coarse, fine, and extra fine powder. The coarse powder for use in poultices, the fine powder for making demulcent mucilaginous drinks. The powdered bark is sometimes adulterated with damaged flour and other starchy substances, but if pure it should be free from starch. The disintegrated cut bark is easily moulded, when moistened, into suppositories, pessaries and tents. The mucilage resembles that of linseed in character, but is more pleasant to the palate.

**Embezzlement.**—The term embezzlement is used to describe the form of theft committed by a clerk or servant who converts to his own use any chattel, money or valuable security received or taken into possession by him on behalf of his employer. The article stolen must have been received from a third party; if the employee steals something entrusted to his custody by his employer the offence is not embezzlement, but larceny. However, upon a charge of larceny the jury may convict of embezzlement and *vice versa*. The offence is a felony, punishable by penal servitude for any term not exceeding fourteen years. Statutory provision has been made for embezzlement by special classes of persons, such as postal officials and public officials. It is possible for a partner to be guilty of embezzlement in relation to his firm's property.





*“Doesn't like cod-liver oil—give him Glax-ovo!”*

The “Vitamin Concentrate” is a 2,000 times concentration of the medicinal portion of cod-liver oil. It is skilfully blended with pure milk, malt extract and cocoa to form Glax-ovo, a fragrant and appetising food-drink made with boiling water only.

Glax-ovo is the only food that contains the “Vitamin Concentrate.” In this wonderful product there is a high concentration of the important anti-rachitic vitamin (now known as Vitamin D)—the accessory food factor that made cod-liver oil famous.

No one could detect in this delicious beverage, Glax-ovo, the powerful extract from cod-liver oil that is in it. You can, doubtless, assure your customer of this from your own experience.

## SPECIAL WINDOW DISPLAY OFFERS

*Great Britain and Northern Ireland*

If you send us an order for GLAX-OVO in original cartons to the value of £3 net, and give a GLAX-OVO Window Display for 14 days, you will receive, as payment for the Display, six 1/6 tins of GLAX-OVO.

When the order is to the minimum value of £5 net, you will receive, as payment for the Window Display, either twelve 1/6 tins or three 6/- tins of GLAX-OVO.

## SPECIMEN ORDERS

Parcel “A.”	£	s.	d.
2 doz. 1/6 GLAX-OVO	1	8	10
1 „ 3/3 „	1	11	2
Carriage Paid	£3	0	0

Including the six 1/6 tins sent as payment for the Window Display, this parcel yields £4 4s. in hard cash.

Parcel “M.”	£	s.	d.
5 doz. 1/6 GLAX-OVO	3	12	1
½ „ 6/- „	1	8	10
Carriage Paid	£5	0	11

Including the twelve 1/6 or three 6/- tins sent as payment for the Window Display, this parcel yields £7 4s. in hard cash.

Write for full particulars to  
**GLAX-OVO**

56 Osnaaburgh St., London, N.W.1

# GLAX-OVO

“EVERY DROP SHEER NOURISHMENT”

**ADD NO MILK**

NOTE:—The “Vitamin Concentrate” is now supplied separately, suspended in glycerin for convenience of administration, as OSTELIN. In 45 dose phials which retail at 2/6. Four drops are equal to a drachm of cod-liver oil.



ask  
**BERK**  
*Acid & Chemical Manufacturers Since 1870*

**ACIDS**

*Sulphuric  
Nitric  
Hydrochloric  
Lactic  
Hydrofluoric  
Citric  
Tartaric  
Perchloric*

for  
**CASCARA BARK**  
&  
**SENNA LEAVES**

**HEAVY & FINE  
CHEMICALS**

*Quicksilver  
Mercurial Salts  
etc.  
Medicinal  
Chemicals  
CRUDE DRUGS  
American  
Botanicals*

*Telephone: Avenue 9362 (6 lines) Wires: 'BERK' Phone, London*

F.W.BERK & CO LTD 106 FENCHURCH ST. LONDON E.C.3. Works at STRATFORD E. and MORRISTON, GLAM.

TAS. ch50.

**LEVER'S  
GLYCERINE**

*Best for all pharmaceutical and  
industrial purposes*

*Our chemically pure glycerine is guaranteed to comply with all the  
requirements of the Food and Drugs Act and the British Pharmacopoeia*

*Write for free sample to*

**LEVER BROTHERS LIMITED**  
Glycerine Dept, JR, 46 Chancery Lane, London, W.C.2

LG 9-200A

**CHLORAMINE T.**

(AKTIVEN BRAND)

**THE MODERN DISINFECTANT**

**PATENT PHOSPHATES & MERCHANDISE LTD.**  
6 FENNEL STREET, MANCHESTER.

**ACID  
SALICYLIC**

**Warrington Chemical & Drug Co., Ltd.**

Paddington, nr. Warrington.

Telegrams: "Salicin, Warrington."

**PARA AMIDO PHENOL**

**SODA  
SALICYLATE**

**BURKETT, SHARP & CO., LTD**  
**DRUGS** 21, MINCING LANE, **CHEMICALS**  
LONDON, E.C.3.





# Chemicals

**ACID PYROGALLIC**  
**AMIDOL-JOHNSONS**  
**METOL-JOHNSONS**  
**HYDROKINONE**

SEE OUR STAND

**A 39**

**BRITISH  
INDUSTRIES FAIR**

**IRON PERCHLORIDE**  
**PARAMIDOPHENOL**  
**SILVER NITRATE**  
**GOLD CHLORIDE**

WE SOLICIT ENQUIRIES FOR ALL PHARMACEUTICAL, GENERAL &  
 PHOTOGRAPHIC CHEMICALS, also CRUDE DRUGS.

## JOHNSON & SONS

23 Cross Street,  
Finsbury, E.C.2

Manufacturing Chemists, Ltd.  
 TELEPHONE: CLERKENWELL 1660.

12 Queen Street,  
Manchester

## ALKALOIDS "SANDOZ"

ARECOLINE HYDROBROMIDE  
 ARECOLINE HYDROCHLORIDE  
 ATROPINE PURE  
 ATROPINE SALICYLATE  
 ATROPINE SULPHATE  
 BRUCINE PURE  
 BRUCINE NITRATE  
 BRUCINE SULPHATE  
 CEPHAELINE PURE  
 CEPHAELINE HYDROCHLORIDE  
 COLCHICINE PURE  
 COLCHICINE PURE AMOR-  
 PHOUS  
 COTARNINE HYDROCHLORIDE  
 COTARNINE PHTHALATE  
 EMETINE HYDROCHLORIDE  
 ESERINE SALICYLATE  
 ESERINE SULPHATE  
 HOMATROPINE PURE  
 HOMATROPINE HYDROBROMIDE

HOMATROPINE HYDRO-  
 CHLORIDE  
 HOMATROPINE SULPHATE  
 HYDRASTININE HYDRO-  
 CHLORIDE  
 HYOSCINE HYDROBROMIDE  
 HYOSCINE HYDROCHLORIDE  
 HYOSCYAMINE PURE  
 HYOSCYAMINE HYDROBROMIDE  
 HYOSCYAMINE HYDRO-  
 CHLORIDE  
 HYOSCYAMINE SULPHATE  
 PILOCARPINE PURE  
 PILOCARPINE HYDRO-  
 CHLORIDE  
 PILOCARPINE NITRATE  
 PHYSOSTIGMINE SALICYLATE  
 PHYSOSTIGMINE SULPHATE  
 SCOPOLAMINE HYDRO-  
 BROMIDE

SCOPOLAMINE HYDRO-  
 CHLORIDE  
 THEBAINE CRYST.  
 THEBAINE HYDROCHLORIDE  
 STRYCHNINE, all salts  
 VERATRINE PURE  
 VERATRINE SULPHATE  
 YOHIMBINE HYDROCHLORIDE  
 YOHIMBINE TABLETS in tubes  
 of 10 tablets of 0.005 gramme  
 YOHIMBINE TABLETS, for Vet-  
 erinary use in tubes of 10 tablets  
 of 0.1 gramme  
 YOHIMBINE TABLETS, for Vet-  
 erinary use in tubes of 10 tablets  
 of 0.01 gramme  
 METHYLENE BLUE MED.



**The SANDOZ CHEMICAL Co., Ltd.**  
**(Pharmaceutical Department), BRADFORD.**

Telephones: BRADFORD 6302, 6303.

Telegrams: "SANDOZ, BRADFORD."



ASSOCIATED HOUSES IN:—  
 BASLE, NEW YORK, TORONTO, PARIS, MILAN, BARCELONA,  
 SWITZERLAND. U.S.A. CANADA. FRANCE. ITALY. SPAIN.





# Hubbuck's Pure Oxide of Zinc

is made by sublimation, and is warranted to contain upwards of

**99.5 PER CENT.**

of pure oxide; in fact, the impurities are not traceable.

**Thos. Hubbuck & Son, Ltd.**

ESTABLISHED 1765

**24 Lime Street, London, E.C.3.**

MANUFACTURERS OF WHITE LEAD, WHITE ZINC, PAINT, OILS, COLOURS, VARNISHES, &c.

Australian Office: 34 Queen St., Melbourne.

Sold by the following Wholesale Druggists in Boxes of 7 lb. and 14 lb. stamped by the Manufacturers; also in 1-lb. Boxes and 1-lb. Glass Bottles.

Allen & Hanburys (Lim.)	Holkinson, Prestons & Kin
Ayrton, Saunders & Co. (Lim.)	Horner & Sons
Bell, Inc., & Co.	Huskisson, H. O., & Co.
Bleasdale (Lim.)	Inman's Stores (of Edinburgh)
Boots Pure Drug Co. (Lim.)	Lofthouse & Saltmer (Lim.)
British Drug Houses (Lim.)	Mackay, Jno., & Co. (Lim.)
Burgoyne, Burdidge & Co.	Oldfield, Palfinson & Co.
Butler & Crispe (Lim.)	Pinkerton, Gibson & Co.
Clay, Dod & Co.	Potter & Clarke (Lim.)
Cockburn & Co. (Lim.)	Raines, Clark & Co.
Corbyn, Stacey & Co. (Lim.)	Raines & Co.
Dakin Brothers	Rankin & Borland
Duncan, Flockhart & Co.	Silversides, R. B. G.
Evans, Gadd & Co. (Lim.)	Smith, T. & H., (Lim.)
Evans Sons Lescher & Webb (Lim.)	Sonthall Bros. & Barclay
Ferris & Co.	Sumner, R., & Co.
Gale & Co.	Thompson, John, (Lim.)
Glasgow New Apothecaries Co.	Wilkinson & Simpson (Lim.)
Goodall, Backhouse & Co.	Willows, Francis, Butler & Thompson (Lim.)
Harker, Stagg & Morgan (Lim.)	Woolley, Jas., Sons, & Co. (Lim.)
Harkness, Beaumont & Co.	Wright, Layman & Umney (Lim.)
Hatrick, W. & R., & Co.	Wyleys (Lim.)
Hirst, Brooke & Hirst.	

Barry, E. J., New York	McKesson & Robbins, Inc.
Finlay, Dick & Co., New Orleans	New York
E. Fongera & Co., Inc., 90/92 Beckman Street, New York	Muth Brothers & Co., Baltimore
Chas. L. Hulsing, Inc., 5 Platt Street, N. York	Roller & Shoemaker, Philadelphia
Lehn & Fink, Inc., N. York	Schleffelin & Co., Inc., New York
	Shoemaker & Busch, Philadelphia

SAPONINE POWDER (SOLUBLE)  
CREAM OF TARTAR 99/100% B.Ph.  
TARTARIC AND CITRIC ACIDS B.P.  
AMYL ACETATE, GINGERINE,  
CAPSICINE

**Finest Essential Oil Lemon**

We have large quantities for sale and are quoting particularly favourable prices.

**C. W. FIELD, LTD.**

92 WOOD STREET LIVERPOOL.

Telegraphic Address:  
"Amphora, Leicester."

Nat. Tel.  
Central 5218, 5219.

**E. H. BUTLER & SON**

Manufacturing Chemists & Wholesale Druggists

**93 Humberstone Gate, LEICESTER**

FOR

DRUGS  
PACKED GOODS  
PILLS & TABLETS  
PROPRIETARIES

MOTOR DELIVERIES COVERING THE MIDLANDS.

# GALENICALS

from Chemically and Physiologically tested Drugs  
**WILLOWS, FRANCIS, BUTLER & THOMPSON, LIMITED**

89a SHACKLEWELL LANE, LONDON, E.8.

Telegrams—Forty Kinland London.

Telephone—Glissold 6361 (3 lines).



# ALKALOIDS

## Fine Chemicals Opium Derivatives

SALICIN  
CAPSICIN  
CANTHARIDIN  
PODOPHYLLIN  
HYOSCYAMINE  
HOMATROPINE  
JALAP RESIN  
IRIDIN  
ALOID  
GINGERIN  
LITHIA SALTS  
SCAMMONY RESIN

MORPHINE  
CODEINE  
STRYCHNINE  
CAFFEINE  
EMETINE  
THEOBROMINE  
CHLOROFORM

OPIUM  
TELA VESICATORIA  
VERATRINE  
ATROPINE  
CHRYSAROBIN  
DIAMORPHINE  
EMETINE  
BISMUTH IODID.  
EMP. CANTH. LIQ.  
ETHYL MORPHINE  
HYDROCHLOR.  
ERGOTIN

*Goods covered by Dangerous Drugs Acts offered subject to all regulations.*

# T. & H. SMITH L<sup>TD</sup>

BLANDFIELD WORKS : 25 CHRISTOPHER STREET : 32 & 34 VIRGINIA STREET  
EDINBURGH. : LONDON, E.C.2. : GLASGOW.

JAPANESE



# QUININE

## SALTS

**B.P. 1914**

Manufactured by

**HOSHI PHARMACEUTICAL CO., Ltd., TOKYO, JAPAN.**

**STOCKS IN LONDON**

AT COMPETITIVE PRICES FROM SOLE AGENTS

**RALPH L. FULLER & CO., LIMITED,**

Phone : Royal 1677-1678;

21 Harp Lane, London, E.C.3.

Wires : "Ralfuller, London."



# YOUR TABLET ENQUIRIES



**WRITE  
TO-DAY**

**W**E shall be pleased to give immediate attention to all enquiries for Tablets on our list for "Own Name" trade.

In addition to quotations for large or small quantities, we will send, post free, a copy of our illustrated book showing full range of Tablet labels and cartons, and containing facsimiles on paper of many of our new showcards. In quality, purity, therapeutic value, elegance of pack and advantageous prices our "Own Name" Tablets are second to none. They are issued in best quality bottles with well-fitting aluminium caps. Enquiries are also solicited for Tablets in bulk.

SHOW MATERIAL ON REQUEST.

## TABLETS FOR OWN NAME TRADE

ASPIRIN  
AMMONIATED QUININE  
CASCARA  
CINNAMON AND QUININE  
PHENACETIN PHEN. CO.  
VEGETABLE LAXATIVE  
SODA MINT HEADACHE  
COLD CURE  
FORMALIN THROAT  
IODISED THROAT  
BISMUTH DYSPEPSIA  
QUININE BI.SULPH.  
EASTON SYRUP  
HEXAMINE B.P.

**MENLEY & JAMES, Ltd. 64 HATTON GARDEN, LONDON, E.C.1**

ESTABLISHED 1772

# HENRY'S CALCINED MAGNESIA

Continues to be prepared with scrupulous care, in the greatest chemical purity by

Messrs. THOMAS & WILLIAM HENRY, 11, East Street, St. Peter's, Manchester.

And is sold in Bottles, authenticated by a stamp bearing their name.

Trade Mark, "Henry's Calcined Magnesia."

New York: Messrs. SCHIEFFELIN & CO, William Street.

PRICE 2s 9d

Paris: Messrs. ROBERTS & CO 5, Rue de la Paix.

## Pyrogallic Acid Gallic Acid

Manufactured by **J. L. ROSE, Ltd.**

At ABBEY ROAD, BARKING, LONDON, E.

Wholesale and Export only.

## EXSICCATED SULPHATE of SODA, B.P.

Enquiries Solicited.

**PERRY & HOPE, LTD.,** Nitshill, near Glasgow.

Telephone: Giffnock 414 (2 lines).

Telegrams: "Perryope, Nitshill."

THERE IS ALWAYS A DEMAND FOR

# SUGAR COATED PILLS

MADE BY

# PARKINSONS

*It Pays to Stock Them.*

*Trade Enquiries Solicited.*


**PARKINSONS**

MANUFACTURING  
CHEMISTS

**BURNLEY**



# HEXYL- RESORCINOL BOOTS



The new intestinal and urinary antiseptic, supplied in capsules containing the standard dose of 0.15 gm. pure Hexyl-Resorcinol in Olive Oil. Hexyl-Resorcinol-Boots is non-toxic in the prescribed dose, and has no irritant action upon the skin and the tissues. Packed in Boxes of twenty - four capsules.

SOLE MANUFACTURERS:

**BOOTS PURE DRUG CO. Ltd.**

*Manufacturing Chemists & Makers of Fine Chemicals*

**NOTTINGHAM ————— ENGLAND**

Telephone: 7000 Nottingham. Telegrams: "Drug, Nottingham."

## **BOOTS PRODUCTS**

INSULIN- BOOTS

PITUITARY-BOOTS

CHLORAMINE-T-  
BOOTS

ACRIFLAVINE-  
BOOTS

ASPIRIN- BOOTS

CHLOROFORM-  
BOOTS

SACCHARIN-  
BOOTS



*A High-class Pharmaceutical Preparation  
for sale by Pharmacists only*

# WESTON'S 'STOP-COUGH'

MANUFACTURED BY QUALIFIED CHEMISTS  
AND SOLD ONLY BY QUALIFIED CHEMISTS.  
CAN BE RECOMMENDED WITH CONFIDENCE  
:: AND CARRIES A GOOD PROFIT. ::

*Send us a post-card for our Special Window Display Terms.*

**GRAFTON CHEMICAL CO., LIM'D.**  
**59 GRAFTON STREET, MANCHESTER.**

PHONE : CENTRAL 6914

# Licoricine

ACTS LIKE  
MAGIC

**for Coughs, Colds, &c.**

is the best line of its kind for bringing

**REPEATS**

and it will repay you abundantly to give it

**YOUR RECOMMENDATION**

10½d. size, 8/6 per doz. net. 1/3 size, 12/- net.

3/- size, 27/- net.

£2 worth Carriage Paid.

£6 worth and upwards, subject to 5% discount.

Minimum Retail Prices, 10½d., 1/3, and 3/-.

N.B. — This allows the Chemist a profit of nearly 33%, or 4d. in the 1/- on £6 lots.

**MANDALL & CO., LTD.**

17/23 Stepney Road,

**NEWCASTLE-ON-TYNE.**



**SNOWFIRE  
SEASON  
IS HERE  
AGAIN!**

February, March! — these are the great sale months for the popular Snowfire Tablet. Millions know there's nothing like it for chapped hands, rough skin and cracked lips. Wide-spread advertising will give an added fillip to Snowfire Sales, so get in supplies and make the coming months really profitable.

# Snowfire

**TABLET**

Here are some other equally popular Snowfire lines it will pay you to stock. There's a regular demand for them the whole year round:—

Snowfire Face Powder.  
Snowfire Shampoo.  
Snowfire Soap.  
Snowfire Shaving Stick.  
Snowfire Jelly.  
Snowfire Talcum.  
Snowfire Cream.

F. W. HAMPSHIRE & Co., LTD., Riverside Works, DERBY



# PURE LIQUORICE JUICE

# APOLLO

Made by the **LARGEST LIQUORICE MANUFACTURERS IN THE WORLD.**  
Pure Concentrated Extract of the Richest Root. Contains no added substance.  
Very soluble, smooth to the tongue, and entirely free from grit. A well-shaped  
attractive stick, carefully made under supervision of British staff. Not a sweet-  
meat, but a High-class Pharmaceutical Article.

**APOLLO IS VERY RICH IN GLYCYRRHIZIN.**

In 4 lb. Cartons, 28 in a case. No charge for Bay Leaves.



**MACANDREWS & FORBES, Ltd.,** BUSH HOUSE, ALDWYCH, LONDON, W.C.2

Telegrams: "Macforbes, Estrand, London."

ESTABLISHED 1857.

Telephone: City 8063

## THE BEST HOUSE FOR ASPIRIN CASCARA AND ALL TABLETS IN BULK.

Write for samples and prices before buying.  
Superior machinery and scientific control.

**R. GIBBINS & CO.**

1 BIRKBECK ROAD, KINGSLAND, LONDON, E.8.

## GLYCERINE

PRECIPITATED CHALK, MINERAL OILS & JELLIES  
LIQUORICE guaranteed pure  
(BLOCK, STICK & ROOT)

DECOLORISING CARBON

COD LIVER OIL. OLIVE OIL. CASTOR OIL.

PERSULPHATES: Ammonium, Potas-  
sium and Sodium.

**HALLER & PHILLIPS, LTD.**

(Established as GEO. HALLER & CO., in 1878)

Mildmay Chambers, 69 Bishopsgate, London, E.C.2

Phones: London Wall 4456/7. Tel. Add.: "Haloid, Stock, London."

## I. D. F. (Indigestion—Dyspepsia—Flatulence) TABLETS

are becoming increasingly popular.  
Repeat orders and testimonials are sent  
by every Chemist who tries them.

**At 6/6 per doz. 50's they show  
A GOOD MARGIN of PROFIT**

The tablets are highly palatable, and the  
formula has been carefully thought out to  
achieve results. The pack is distinctive,  
the label and carton being neatly executed  
in black and red. Attractive show-cards  
are supplied with every order.

Send an order now and secure your  
share of this profitable business.

*A testing sample and specimen  
pack will be sent free upon request.*

**THE COOPER LABORATORY  
WATFORD, HERTS.**

Telephone 6x2.

Telegrams: "Science, Watford."





*Get on this  
Now!*

Keep up your stocks of "GRIPS" First-Aid Pastilles and get your share of the big "GRIPS" business during February, March and April, the coldest period of the year.

There is an ever-increasing demand for these pastilles with the delicious flavour of scientifically blended Menthol, Eucalyptus and Liguorice.

To avoid delay, let us know your requirements EARLY!

Distributing Agents to the Wholesale and Retail  
Chemists' Trades:—

**THOS. CHRISTY & CO.,**  
4/12 Old Swan Lane, LONDON, E.C.4

**GRIPS'**  
**FIRST AID PASTILLES**

Made by LIGHTBOWNS of ACERINGTON.

## CHEMISTS

who do not stock

# BELTONA

THE NEW TREATMENT

(Outward Application Only)

for

## RHEUMATOID ARTHRITIS

Rheumatism, Lumbago, Neuritis, Gout, etc.

are missing a chance, not only of increased profit, but of earning the thanks of customers who gave it a trial on their recommendation.

Testimony similar to that published below from someone to whom you had recommended "Beltona" would be bound to bring other customers to your shop.

4, Lansdown View, West Tiverton, Bath

DEAR SIRS.—At the time I sent for "Beltona" <sup>2/2/26,</sup> I was in agony and too ill to write, but would now like to tell you what good it has done me. I could not get my arm to my head or dress myself; the doctor said it was Rheumatoid Arthritis. I never shall forget the pain, but after using "Beltona" liberally, I could soon raise my arm as usual. I have had five 5/- bottles from my chemist.

My sister had suffered for many years with Neuritis and got no sleep; now she can use her arm and do her own work. She is still using "Beltona" and hopes soon to be quite well. It is wonderful what it has done.

I have sent one of your pamphlets to Canada and another to Devonshire. You may use this letter as you please. I told my doctor that if I had the means I would like to go about using it on poor sufferers.

Yours gratefully,  
MISS BRANCH.

<sup>29/1/26.</sup>  
GENTLEMEN,—As a sufferer from Rheumatism, and having had direct from you one of your 5/- bottles of "Beltona," I wish to pen to you my appreciation of the great qualities which "Beltona" possesses in bringing relief to a sufferer of the said complaint.

It has been wonderful in its action by relieving me of such pain, which at times has rendered me unfit to follow my employment. I asked the local chemists to have it stocked, and have since had three or four bottles from them; also recommended it to several of my workmen, who have also purchased from them with satisfying and congratulating results.

Ashington being one of the largest mining districts, and having a population of from 40,000 people, one is continually hearing of Rheumatism, and it is a miners' complaint generally, so I will therefore do you a service by recommending "Beltona."

If you wish to use this letter you are at liberty to do so, but please use initials only. W. J. H.  
Ashington.

Why not send for Literature and at the same time order ½-do. or ¼-do. bottles. It will pay you handsomely. Also send for particulars of bonus for Window Display.

### LABELLING OF POISONS ORDER.

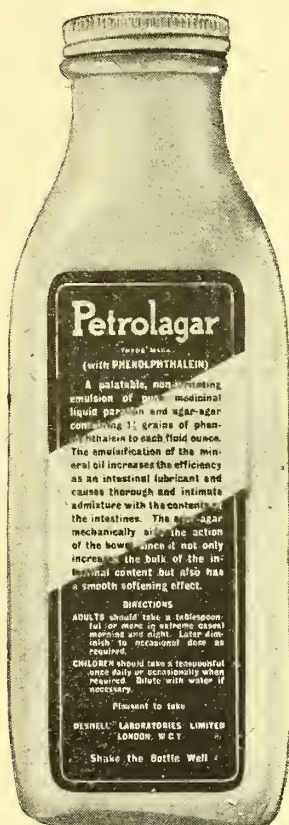
New labels are necessary for "Beltona" to meet the requirements of this Order. Will chemists holding stocks please send to us for labels.

"Beltona" retails at 3/- and 5/- per bottle. ½-gallon bottles £1. Price 27/- per doz., 45/- per doz. and 192/- per doz. Can be obtained direct from BELTONA, LTD., 71 High St., Hoddesdon, Herts., or through all the principal wholesalers.



# Petrolagar

(DESHELL)  
(TRADE MARK).




---

---

16 oz. size

**5/6**

P.A.T.A.

---

---



---

---

8 oz. size

**3/-**

P.A.T.A.

---

---

*Issued in Pound and Half-pound Sizes as follows:*

No. 1 - PLAIN  
No. 3 - ALKALINE

No. 2 - PHENOLPHTHALEIN  
No. 4 - UNSWEETENED

The Principle of Lubrication and Bulk calls for the usage of Petrolagar Plain in all cases unless special considerations indicate one of the other forms.

MADE IN ENGLAND BY

**DESHELL LABORATORIES**  
LIMITED

1-3 BRIXTON ROAD

- LONDON, S.W.9



**MENTHOLATUM—WARNING AS TO PASSING OFF.****MENTHOLATUM**

Registered Trade Mark Number 280334.



*In the High Court of Justice—Chancery Division.  
Mr. Justice Lawrence.*

**Mentholatum Company Limited v. J. .... L. .... & Co.**

By a Judgment of Mr. Justice Lawrence in the above action given on January 19th, 1926, an injunction was granted restraining the Defendants, their servants and agents from infringing the registered trade marks of the MENTHOLATUM COMPANY LIMITED shown above and the Defendants were ordered to deliver up to the Plaintiffs all catalogues, advertisements, labels, jars, tins and cartons offending against the injunction.

An inquiry was ordered as to damages sustained by the Plaintiffs and the Defendants were ordered to pay the costs of the action.

The Judgment referred to in this advertisement was given in respect of goods exported from Hamburg, and the Trade and the Public are hereby warned that the marks shown above are registered marks which (or very closely similar marks) are protected in every country where trade mark registration is available and IMMEDIATE LEGAL PROCEEDINGS without notice will be taken against any person, firm, or company infringing the said marks in any part of the world.

**IMITATION IS THE HIGHEST FLATTERY.**



**TO RELIEVE AND SOOTHE HEADACHE,  
COLDS IN THE HEAD, NASAL CATARRH, SORE THROAT,  
CHILBLAINS, CHAPPED SKIN, CUTS, BURNS, TIRED &  
ACHING FEET, SKIN IRRITATION, SUNBURN, INSECT BITES, &c.  
DIRECTIONS: APPLY TO THE PARTS AFFECTED  
THE MENTHOLATUM CO. LIMITED.  
SLOUGH, ENGLAND**

**AWONDERFULLY SOOTHING  
AND HEALING APPLICATION  
AFTER SHAVING.  
MADE IN ENGLAND.**

Registered Trade Mark Number 451742.



**A HEALING CREAM**  
**Mentholatum**

**THE**  
**Mentholatum Co. Ltd.**  
**SLOUGH - BUCKS**  
January 1926.

**INFORMATION**

regarding such of

**CALVERT'S  
PREPARATIONS**

as are affected by the  
Labelling of Poisons Order  
will be supplied on request by

**F.C. CALVERT & CO.**  
**P.O. Box 147, MANCHESTER**

**DR. BENGUÉ'S BALSAM****RHEUMATISM, NEURALGIA, GOUT.**

**PULMO (BAILLY).—Dr. BENGUÉ'S DRACÉES.  
FORXOL.—HEMOSTYL.—EUPURGO.  
Dr. BENGUÉ'S ETHYLCHLORIDE.  
RICARD-CACHETS (Free sample on application).  
ANESTILE. NARCOTILE. MUTHANOL.  
EUPHORIAN AMPOULES (Entero-Antigens)**

**WRITE FOR Dr. BENGUÉ & CO., MFG. CHEMISTS,  
SPECIAL TERMS 24, FITZROY ST., LONDON, W.1.**

**Iglodine.**

Can you say "Yes" when IGLODINE is requested?

IGLODINE is being advertised. The unfailing effectiveness of its action is going to make trial purchasers into IGLODINE enthusiasts.

Every Chemist should be prepared to supply IGLODINE—a dependable antiseptic, quick-selling and profitable.

*Write for fullest particulars and terms—*

**The IGLODINE Co., Ltd., Pilgrim St., Newcastle-on-Tyne.**



WORTH A GUINEA A BOX.

# Beecham's Pills

## HOME PRICE LIST

### Beecham's Pills:

1s. 3d. size	-	11s. 9d. per dozen
3s. 0d. „	-	28s. 0d. „
5s. 0d. „	-	54s. 0d. „

Less 2½% Cash Discount.

A further 5% allowed for Window  
or other Advertising display.Orders: Minimum quantity £5 value (Assorted sizes).  
PACKAGES FREE. CARRIAGE PAID.  
TERMS: CASH WITH ORDER.Cheques to be made payable to THOMAS BEECHAM,  
and crossed "Westminster Bank, Ltd., St. Helens."**THOMAS BEECHAM, ST. HELENS, LANCs.**

(Proprietors: Beecham Estates and Pills, Ltd.)

*Worth an  
enquiry—*

## SULPHUR

and

## RASPBERRY BLOOD PASTILLES

2d. per oz. 7½d. per 4 ozs.

Showcard, Bags, etc.

**ERNEST JACKSON & CO., Ltd.**

Works:

Credition,  
Devon.

'Phone CREDITON 10.

London Office:

Plantain Place, Crosby Row,  
Borough, S.E.1.

'Phone: HOP 2668.

**HOWARD'S  
SEIDLITZ  
USED.****G.O.**  
(CELLOPHANE  
PACKED)In 1 doz. and 6 doz. show outers.  
Packed in smart envelopes with  
your name and address on back.  
Choice of two styles.  
Window Slips and Showcards supplied.

## Seidlitz Powders

Lemon Flavoured Sweetened, extra strong, 3d.  
B.P. Strength, 2d.

## DOUBLE BONUS FOR FEBRUARY ONLY

		Cost			Retail		
		£	s.	d.	£	s.	d.
1	1 Gross 3d. Bonus 20 × 3d.	1	1	0	2	1	0
2	1½ Gross 3d. Bonus 40 × 3d.	1	11	6	3	4	0
3	3 Gross 3d. Bonus 120 × 3d.	3	3	0	6	18	0

For Mixed 2d. and 3d. Parcels substitute in  
proportion of 9 doz. 2d. for 6 doz. 3d.

Supplied only to the Drug Trade. P.A.T.A.

Carriage Paid less 2½% for C.W.O.

**MILNER'S  
MANUFNG. CHEMISTS**

(J. Milner, M.P.S.)

11 JOHN PENN STREET  
LONDON, S.E.13.



## TO THE RETAIL CHEMISTS and DRUGGISTS of GREAT BRITAIN

FOR some time past the "Wampole" Brand Specialties have been regularly detailed and sampled to the Medical Profession of Great Britain, with the result that the demand has increased greatly and is steadily growing.

All chemists should have these well-known preparations on hand, in order to be able to fill promptly physicians' prescriptions.

Revised P.A.T.A. Prices—		Minimum Retail	Per Dozen
Extract of Cod Liver—Wampole	15 oz.	5/-	45/-
	6 oz.	3/-	27/-
Phospho-Lecithin—Wampole	16 oz.	6/-	51/6
	8 oz.	3/6	30/-
Creo-Terpin Comp.—Wampole	16 oz.	8/-	71/6
	8 oz.	4/6	40/6
Magma Magnesia—Wampole	16 oz.	2/6	22/-
Magnolax Brand Emulsion—			
Wampole	16 oz.	4/-	34/-
"	8 oz.	2/6	22/-

Winchesters—Prices on Application.

MADE IN CANADA BY  
**HENRY K. WAMPOLE & Co. Ltd.**

Manufacturing Pharmacists,  
PERTH, ONTARIO, CANADA.

British Distributors:—  
**FRANCIS NEWBERRY & SONS, LTD.**  
LONDON, E.C.1.



## HIGGOLENE

"Higgoles" is a preparation which, under its old name of Higginson's Herbalene Skin Ointment has for almost a century been looked upon in the Midland Counties particularly, as the one unfailing remedy for all troubles of the skin.

Under its new name and new get-up, but still made strictly according to the original formula, "Higgoles" is to be the object of a National Advertising Campaign which will make its unique qualities known throughout the Country.

It is to be sold at **1/3** per box.

May we send you samples and particulars of the advertising aid which will be available very shortly?

Sole Proprietors:

**HIGGOLENE LIMITED,**  
Upper Bond Street, Hinckley.

Also manufacturers of "SPECIFENE" a really great specific for Blood Poisoning and Inflammation.

W.B.

## A Three-Fold Profitable Demand— and growing

Sphagnol soaps and ointment are nature's own treatment for the skin. They are in strong demand by sufferers from all forms of skin trouble. Over 10,000 British doctors recommend them.

Sphagnol Shaving Soap has been described by the medical profession as incomparable for tender skins.

Ladies ask for Sphagnol toilet preparations which give real health and beauty to skin and hair.

Write for particulars and terms  
of these Sphagnol preparations:—

Per cent. Strength	Per cent. Strength
Medical Soap .. 15	Toilet Cream .. 5
Toilet Soap .. 5	Lotion (non-greasy) 10
Shaving Soap .. 5	Shampoo .. 5
Ointment .. 10	Liquid .. 5
Suppositories .. 10	Powder .. 5

Also special Soap and Ointment for veterinary use.

# Sphagnol

SOAPS, OINTMENTS, ETC.

**PEAT PRODUCTS (SPHAGNOL) LTD.**  
18-19 Queenhithe - - Upper Thames St., E.C.4

108-46

## To Overseas Traders

We have a special Drug Department and expert Buyers for all kinds of Drugs, Chemicals, Hospital requisites, Photographic, Optical and Dental Goods.

Indents promptly and carefully executed for all parts of the world if accompanied by Bankers' Credit.

Original Invoices supplied.

Moderate Buying Commission.

All discounts allowed.

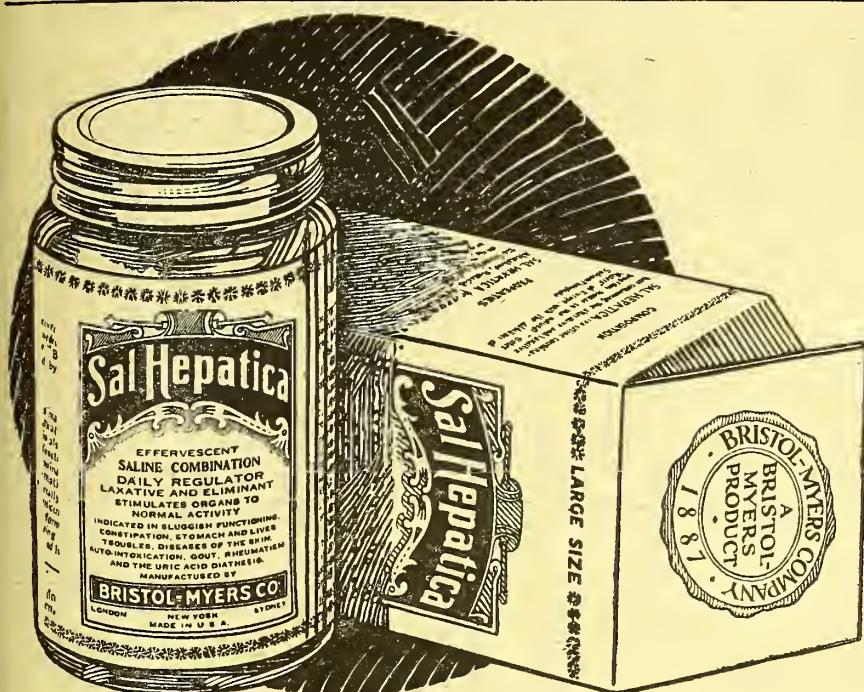
Enquiries Invited.

**FOWLIE & BODEN, LTD.** (John Murdoch)  
29/35 CITY ROAD - - LONDON, E.C.1

**DUTCH  
Sugar  
of Milk.**  
"THE BEST"

**HOLLANDSCHE  
MELKSUIKERFABRIEK  
Amsterdam**





Sal Hepatica contains two vital salts—sodium phosphate and lithium citrate—not to be found together in any other saline.

## For the Ailments caused by acid conditions

*Indigestion and rheumatism in their acutest forms  
yield to this effervescent saline*

**D**OCTORS have long realized how essential it is to maintain the alkaline balance in the body—that is why they so often prescribe Sal Hepatica.

Once this balance is broken down—once the acids which are always being produced by food predominate in the system—then chronic indigestion and rheumatism develop.

To prevent these ailments, to check them in the early stages, to eliminate them from the system when they are in their most acute form—that is the function of Sal Hepatica.

These are the special display offers—order from us or through your regular P.A.T.A. wholesaler; the generous terms hold either way.

No. 1—Six dozen "small" and three dozen "large" for £7.17.11½ instead of the usual £8.15.6—a reduction of 10%. This means a total profit to you of £3.16.0½, or 48.1% on your investment.

No. 2—Three dozen "small" and one dozen "large" for £3.8.8 instead of £3.14.3—a reduction of 7½%. This means a total profit to you of £1.10.4, or 44.1% on your investment.

No. 3—One dozen "small" for 14/11½ instead of the usual 15/9—a reduction of 5%. Your total profit is 6/0½, or 40.5% on your investment.

TERMS—For direct orders on Nos. 1 and 2—payment in 30 days, or if you like, an extra 1½% for cash. For No. 3—cash should be paid with order or on delivery.

Many of your customers refuse the usual remedies for fear of forming a habit. With Sal Hepatica, however, goes the certainty that it does not produce a condition of tolerance in the system.

Instead it works by stimulating the eliminating organs in such a way that they will function properly themselves.

Such a remedy, in the form of an effervescent saline, is indispensable in your shop.

### **Bigger sales—bigger profits**

Keep Sal Hepatica on show and benefit by the special terms, with reductions of 10%, 7½%, and 5%.

Write for the fresh, attractive show material which we have ready for you. Bristol-Myers Company, 112, Cheapside, London, E.C.2.

# Sal Hepatica



# WINTER SPECIALITIES

*Send us your Enquiries for*

**MALT & OIL, COD LIVER OIL EMULSION, COUGH MIXTURES, EMBROCATION, B.P. LINIMENT, Etc., Etc.**

These and many other preparations necessary to the Winter trade are illustrated and priced in our latest catalogue, which we shall be pleased to mail you.

*Special Quotations given for Winter's Supply of Malt and Oil.*

## BLACKIE'S COLD CREAM IS AN ASSET TO YOUR BUSINESS

FREE SAMPLE AND PRICE ON APPLICATION.

## ROBERT BLACKIE

*Sole Proprietor and Manufacturer of World-Famed "SPUN" (Regd. Trade Mark) OINTMENT*

**SHEN WORKS, TOWER BRIDGE ROAD, LONDON, S.E.1**

Telephone : HOP 2415.

Telegrams : "USHENSUNA, LONDON."

## MAJAX

The ideal milk sugar for babies. We are having direct orders from all parts of the country. Why not participate in this business?

*For terms write to Proprietors*

**MAWSON & PROCTOR, LTD.  
NEWCASTLE-ON-TYNE.**

**ALL CHEMISTS  
SHOULD STOCK**

## ABDINE

THE GOLD MEDAL HEALTH DRINK.

Quick Seller. Big Profits. Over 40 years' Reputation.  
"Abdine" is the most popular Health Drink, superior to all Mineral Waters. The Original and only genuine Fruit Drink.

*Reduced Price List can be had on application.*

DUNCAN McGLASHAN, LTD., ABDINE WORKS, WESTFIELD RD., EDINBURGH

**It pays to stock and display—  
CLARK'S**

## Glycola

The most successful preparation of its kind for many years. It brings customers back again and is a sure builder of goodwill.

Retail at 8d., 1/4 and 3/- per bottle.

CLARK'S GLYCOLA Ltd., 61 Oak Grove, Cricklewood, London, N.W.2

# QUININE

QUINIDINE  
CINCHONINE  
CINCHONIDINE

Sugar-coated Quinine Tablets and Pills.

BANDOENG  
JAVA

Telegrams : "Kininefabriek Bandoeng."

## BANDOENG QUININE FACTORIES

Samples, prices and particulars on application.

and

# SALTS

Gelatine-coated Oval Pills.

AMSTERDAM  
De Wittenkade 48-50.

Telegrams : "Semadmy Amsterdam."



## *A New Biological Product from the P., D. & Co. Research Laboratories*



AN important advance in the treatment of scarlet fever has been registered by Scarlet Fever Streptococcus Antitoxin (P., D. & Co.) which is prepared according to methods perfected in the Medical Research Laboratories of Parke, Davis & Company.

Previously, when scarlet fever has been treated with a serum, a dose of sometimes as much as 100 c.c. has been necessary. With Scarlet Fever Streptococcus Antitoxin (P., D. & Co.) one dose of 10 c.c. is usually sufficient.

This diminution in dose is the result of high concentration. It means less discomfort to the patient and less risk of serum rash.

The new serum is being used in leading fever hospitals in England, Scotland and Ireland with impressive results. From reports received from these hospitals it appears that, providing the serum is given early, the patient's stay in hospital is reduced from an average of six weeks to about half that time.

# Scarlet Fever Streptococcus Antitoxin

*Supplied in bulbs of  
10 c.c. by  
Parke, Davis & Co.  
50-54 Beak Street  
London, W.1.*

(PARKE, DAVIS & CO.)



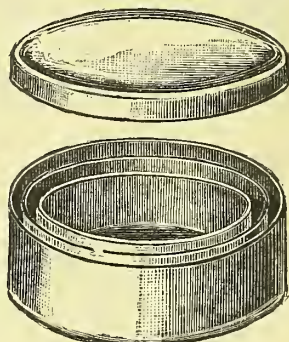
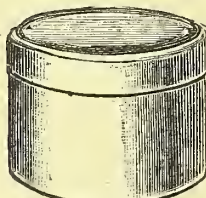
# ALUMINIUM OINTMENT BOXES

Fill the gap between the chip box and the porcelain pot.  
Try an assorted dozen. You will find them just what  
you want.

## REDUCTION IN PRICES

PRICES (either shape,  
tall or flat):

Per gross:  $\frac{1}{4}$  oz. 9/-  
                  "  $\frac{1}{2}$  oz. 12/-  
                  " 1 oz. 15/-  
                  " 2 oz. 24/-



$\frac{1}{4}$  oz.                      1 oz. TALL.  
(The 2 oz. tall shape is similar to the 1 oz. size but twice the height.)

FLAT SHAPE NESTED.  
 $\frac{1}{4}$  oz.     $\frac{1}{2}$  oz.    1 oz.    2 oz.

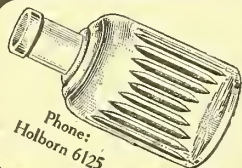
Chemists everywhere are taking up the use of these for their preparations. Their light weight as compared with porcelain pots makes for much saving in regard to carriage, the nested ones being specially suited for export. For large contracts special rates will be quoted. Samples free for the asking.

CARRIAGE PAID ON ORDERS OF £3 AND UPWARDS.

A discount of 5% for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

**BURGE, WARREN & RIDGLEY, LTD.**

91 & 92 GREAT SAFFRON HILL,  
LONDON, E.C.1.



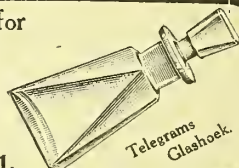
**GLASS BOTTLES**

of every description for  
all purposes.

ENQUIRIES SOLICITED.

**VAN DER HOEKS**

321/25 Bank Chambers  
329 High Holborn  
LONDON, W.C.1.



Telegrams  
Glasboek.

**LABELS**

For Chemists, Drug Stores and  
Herballists. Slip Labels 2/6 per  
1,000. Dispensing Labels 3/6 per  
1,000. Circles 3/6 per 1,000. Pure  
Gummed Paper. Price List and  
sampler sent on receipt of a  
post card.

**ELLAMS & COMPANY,** Medical Label  
Printers,  
Est. 1340, 33 HANOVER STREET, LIVERPOOL.



Ask for "PAZO"  
**PILL BOXES**

The most convenient and  
secure Pill Box obtainable.

**NO LOOSE BOTTOMS**

Samples and Prices on application

The "PAZO" CO., Oldbury

**FREDK. YOULDON**

(Formerly Proprietor of E. Youldon. Established 1840)

**68 BASINGHALL STREET  
LONDON, E.C.2**

Phone:  
London Wall 3529.

Telegrams:  
"Youldon, Ave, London."

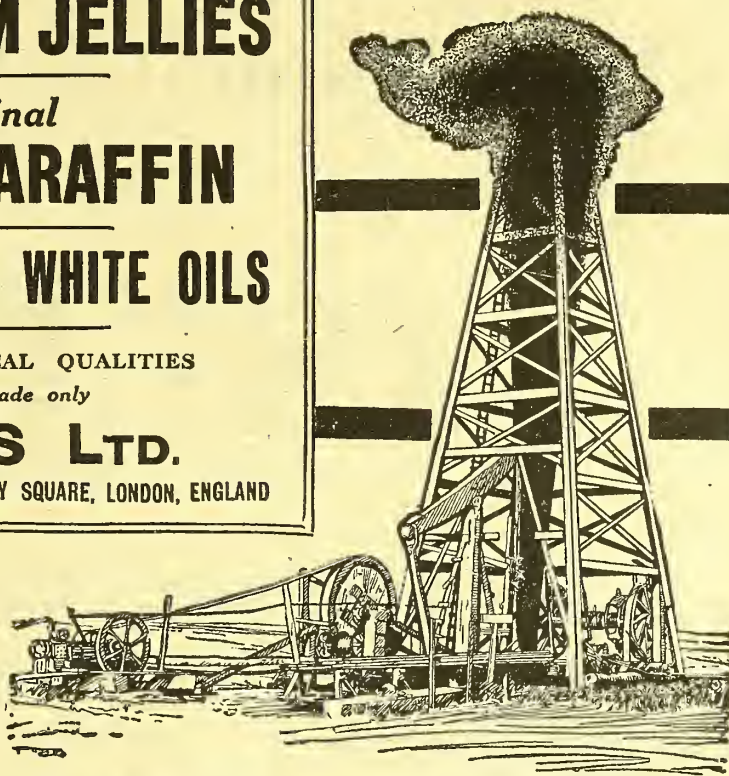
Enquiries and orders for  
ALL KINDS OF  
**GLASS  
BOTTLES**  
will receive immediate attention.

**PETROLEUM JELLIES***Medicinal***LIQUID PARAFFIN****WHITE & HALF WHITE OILS**

B.P. AND TECHNICAL QUALITIES

*Wholesale Trade only***STERNS LTD.**

80 ROYAL LONDON HOUSE, FINSBURY SQUARE, LONDON, ENGLAND



*Russolax*  
REGISTERED TRADE MARK

**Russian Medicinal Paraffin**

*Recommended by the most eminent  
Surgeons and Physicians for Chronic  
Intestinal Stasis (Chronic Constipation).*

OBTAINABLE AT ALL CHEMISTS  
AND STORES IN 10-OZ. AND 20-OZ.  
PANEL BOTTLES.

*Sole Manufacturers:***Reddgrave, Butler & Co., Ltd.***Liquid Paraffin Specialists,*

FOREST LANE, STRATFORD, E.15



**NECTAR  
CREAM**  
(Regd. Brand)  
**OLIVE  
OIL**

**The BEST the World Produces**

To those who appreciate QUALITY,  
Nectar Cream appeals irresistibly, as  
hundreds of regular users can testify.  
Chemists NEED the BEST.

*Write for samples and prices of bottles, cans, and casks, to Sole Importers*

**RAYNER & CO., LTD.**  
NORTH ROAD - LONDON, N.7



# Petroleum Jelly

White, Yellow, Amber,  
& Ruby Red, for all  
Pharmaceutical and  
Veterinary purposes

**MEADE-KING, ROBINSON & CO., LTD.**

Liverpool - London - Manchester - Birmingham - Leeds

PARAFFINIUM LIQUIDUM B.P.

HALF-WHITE OILS,  
TRANSFORMER OILS

TECHNICAL WHITE OILS

PETROLEUM JELLIES SNOW WHITE BP AND NATURAL WHITE BP

## Pure Russian White Oils

**HARDING, HOLLAND & FRY, LTD.**  
52 QUEEN VICTORIA STREET, LONDON, E.C.4.

Telegrams: "Seedtime, Cannon, London."

Telephone: City 590 (2 lines).

# PETROLEUM JELLY

Best qualities Yellow and White B.P., Red Veterinary and Green.

**GOUGH, KIDSTON & CO.**

43/45 Gt. Tower Street, London, E.C. 3

Tel. No.: Royal 2666 & 2667.  
Tel. Add.: Kidstonism.

Also GUM ARABIC and TRAGACANTH  
BEESWAX and JAPAN WAX.

Works: Bermondsey.  
Tel. No.: Hop. 2029.

Telephone—VICTORIA 7533 (4 lines).

Telegrams—"Dicotto, Sowest, London."

# W. B. DICK & CO., LTD.

## 26 Grosvenor Gardens, London, S.W.1

Works : LONDON, LIVERPOOL, GLASGOW

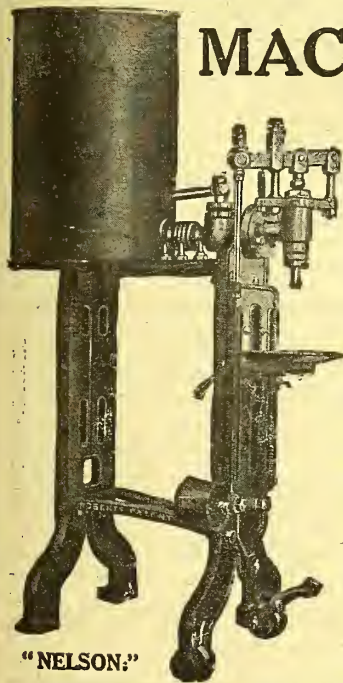
### PARAFFINUM LIQUIDUM B.P.

S.G. 890/5. Guaranteed to remain bright at 0°C.

White and Half White Oils  
B.P. White and Yellow Petroleum Jellies

QUOTATIONS & SAMPLES will be sent on application.

### ROBERTS' ORIGINAL PATENT BOTTLE-FILLING MACHINES



"NELSON."

Don't waste money  
on imitations, buy  
Roberts' Machines  
which actually  
Created the Records  
for

**CLEANLINESS  
SIMPLICITY**  
and Rapidity in  
Bottle Filling.

Write for new  
Price Lists.

NOTE the Address :  
**ROBERTS' PATENT  
FILLING MACHINE CO.  
33 ROUNDCROFT ST.  
BOLTON.**

Our latest patent  
"Alpha," price £12,  
will fill 10 gross bottles  
per hour.

Write for Particulars.  
All Rights Reserved.

## PETROLEUM JELLY

("SALVO PETROLIA")  
BRAND

THE PERFECTION OF PETROLEUM JELLY.  
MANUFACTURED SOLELY BY

# THE DEE OIL CO. LD.

**D 23 & 24 EXCHANGE BUILDINGS  
LIVERPOOL**

TELEPHONE: **CENTRAL 3859**      TELEGRAMS: **"CESTRIAN"**

LONDON OFFICE  
49 LIME ST. EC3.      PHONE: AVENUE 2885

**PACKED IN BARRELS KECS OR  
SMALLER PACKAGES IF DESIRED.**

OTHER GRADES OF  
PETROLEUM JELLIES, WHITE BASES ETC.  
**WHITE OILS B.P. & Technical Qualities**  
SAMPLES & PRICES ON APPLICATION

**OLEUM DEELINÆ (DEE OIL)**  
**THE UNFAILING CURE FOR ECZEMA**



*Reprint of Nineteenth Edition.***SQUIRE'S  
COMPANION**

TO THE

**BRITISH PHARMACOPŒIA, 1914.****Published by J. & A. CHURCHILL,  
7 Gt. Marlborough St., W.1.***The Pharmaceutical Journal* says—"A companion, in the true sense of the word, to the official book."*The Chemist and Druggist* says—"It maintains its unique position as a national work of reference."*The British Medical Journal* says—"No labour has been spared to make the COMPANION a complete, scientific and practical adjunct to the BRITISH PHARMACOPŒIA."*Descriptive leaflet gratis.***Price 25s. net.****Chemists, 23s.****Post Free (inland) 23s. 9d.***New  
Edition***Squire's  
Pharmacopœias  
OF THE  
London Hospitals***NINTH EDITION.***Published by J. & A. CHURCHILL,  
7 Gt. Marlborough St., London, W.1.**

A systematic comparison of the formulæ of thirty-one of the London hospitals, including the Children's Hospitals and the French Hospital. The formulæ are arranged under the headings of the various preparations so that an immediate comparison may be made between the prescriptions of the different institutions.

*The British Medical Journal* says—"The value of the book to the medical profession is even greater than that of its predecessor, since it comprises a practical compendium of all the best medical treatments."

*The Lancet* says—"There can be no question of the practical utility of a book which presents an exhaustive comparison of the pharmacopœias of the London hospitals, for in these institutions the formulæ will be selected for the best reasons which the knowledge of the day can furnish, while their selectors represent leading authorities on all therapeutic questions."

**Price  
12s. 6d. per copy.****Post Free  
(inland) 12s. 11d.****SQUIRE & SONS, LTD.****413 OXFORD STREET, LONDON, W.1**

Telegrams: "Squire, Wesdo, London."

Telephones: Mayfair 2307 (2 lines)

**MANY SUCCESSES IN THE EXAMINATIONS**

Your Opportunity to

**QUALIFY IN OPTICS**

**PRACTICAL WORK.** Students taking the course may receive personal tuition in the practical work AT ANY TIME DURING THE COURSE.

*Expert Tuition for the SIGHT-TESTING DIPLOMAS of the Worshipful Company of Spectacle Makers (F.S.M.C.); the British Optical Association (F.B.O.A.); the National Association of Opticians (F.N.A.O.); or the College of Optics (F.C.O.).*

Write for full particulars—

**G. A. SCURR, M.P.S., F.S.M.C., F.B.O.A., F.N.A.O., B.Sc., F.I.O., F.C.O.,  
50 HIGH STREET, BARNET, LONDON, N.**  
S.A. Representative: E. E. G. WOOLLEY, F.S.M.C., M.P.S., c/o H. Neil & Co.,  
215 Bree St., Johannesburg.  
N.Z. Representative: R. C. AITCHISON, Box 168 PALMERSTON, North.

**WESTMINSTER  
COLLEGE OF PHARMACY***Principals:*

G. S. V. WILLS, Ph.C. (Founder), P. H. WOODNOTH, Ph.C., F.C.S.

**COURSES FOR PRELIMINARY SCIENTIFIC  
(Part I) and QUALIFYING (Part II) EXAMINATIONS.****Benches now being reserved for 1926-7 Session.  
Courses will commence early in October, 1926.**

*Full details will be sent on application to:*  
**The Principals, 190 Clapham Road, London, S.W.9**

**LONDON COLLEGE OF PHARMACY**

(FOUNDED BY H. WOOTTON, B.Sc.)

C. W. GOSLING, Ph.C.

**Principal—W. F. GULLIVER, Ph.C.**

Courses of Instruction provided for

**MINOR EXAMINATION  
DAY, EVENING AND PART-TIME CLASSES.****APOTHECARIES' HALL EXAMINATION  
COURSE COMMENCED FEBRUARY 3, 1926.**

Apply—THE SECRETARY, 361 Clapham Rd., LONDON, S.W.9

**THE SOUTH OF ENGLAND COLLEGE OF PHARMACY**

186 CLAPHAM RD., LONDON, S.W.9

**Principal: H. LUCAS, Ph.C., F.C.S.,**  
assisted by a fully qualified and competent staff.**THE SCHOOL FOR SUCCESS****EXAMINATION RESULTS, 1925.**

During the year 1925 (Jan. to Jan.) 60 students from this College have qualified, passing Parts I and II completely.

**A NEW COURSE** starts on OCT. 7; nine months, 30 guineas.  
**A REVISION COURSE** for Part I, and another for Part II, starts on APRIL 8, fee (3 months) 10 guineas..

*For all particulars apply The Principal.*



# WRITE SILVERLOCKS, THEY HAVE IT

**H**ERE'S a list of really useful sundries, some of which you need about now. Look through your stocks and order fresh supplies before your present ones are entirely depleted.

Remember, you can depend upon Suttley and Silverlock's goods for quality and serviceability. Drop us a line whenever you need sundries that are doubly useful because made by a firm with vast experience of your special needs.

## NOW READY. LATIN LABELS.

Revised Edition.  
Black on Yellow paper for Stock Bottles,  
Drawers, etc.

### SELECTED SET.

In Books containing—  
296 Medium Size Labels.  
40 " " Blanks.  
222 Small " Labels.  
42 " " Blanks.  
Price 10/- per set. Post Free.  
Single Labels also supplied to order.  
Large size @ 3/6 per dozen.  
Medium " @ 3/- " "  
Small " @ 3/- " "

## SALE OF POISONS REGISTER BOOKS.

In conformity with the Poisons and Pharmacy  
Act, 1908.

No.	In three sizes.	Price
1. Containing	320 entries .. ..	4/6
2. " "	576 " .. ..	5/6
3. " "	1,024 " .. ..	6/6

## PRESCRIPTION BOOKS.

Silverlock's Approved Prescription Books.

**Long Folio F'cap (size 15 1/2" x 6 1/2")**

No. 1 Quality, Whole Bound Rough Calf, with  
Printed Heading, indexed, 250 Pages 21/6;  
500 Pages 27/6; 1,000 Pages 50/-.

No. 2 Quality Half Bound Buff Basil, without  
Printed Heading, indexed, 500 pages 21/-.

**Broad Folio F'cap (size 12 1/2" x 8")**

No. 1 Quality Whole Bound Rough Calf with-  
out Printed Heading, indexed, 500 Pages 25/6;  
750 Pages 27/6; 1,000 Pages 42/6

No. 2 Quality, Half Bound Buff Basil, without  
Printed Heading, indexed, 500 Pages 19/6

## OPTICAL SALES HELPS.

Our range of Blotters, Showcards and Folders,  
forceful in design and well printed, will stimu-  
late the turnover in your Optical Department.  
Write for full range of samples and prices.

## LABELLING OF POISONS ORDER 1924

Labels to meet the requirements of new  
Poison regulations.

We hold a large and varied stock which can  
be supplied per return of Post.  
Write for Samples.

## DANGEROUS DRUG ACT, SUTTLOCK REGISTER.

Strongly bound in green rexine. Divided into  
sections for Sales and Purchases.  
Meets all the requirements of the Act.  
Send for one NOW. 7/3 post free.

## STOCK CARTONS.

4-oz., 6-oz., and 8-oz. sizes.  
We hold a large stock of Cartons in standard  
wordings for Winter Remedies, etc.  
Send for samples and prices.

**Chemists'  
Printers**

**Suttley &  
Silverlock<sup>®</sup>**  
CHEMISTS' PRINTERS

**Blackfriars  
London, S.E.1**



Write for  
Illustrated  
Lists.

# Venesta Collapsible Tubes

Lipsalve Cases, Sprinklers, etc.

Made in Pure Tin, Lead,  
or Lead coated with Tin,  
Plain or Enamelled, and  
printed with designs to suit  
customers' own requirements

Manufactured by

**Venesta Ltd.**  
1, Great Tower St., E.C.3  
London, England

Telephone :  
ROYAL 4200  
(6 lines).

Telegrams :  
"Venesta, Bilgates  
London."

Tubes, etc., are manufactured to Customers' own specifications





## BAY RUM

*A spirituous preparation with the true West Indian bouquet.*

**Antiseptic, Cleansing, Stimulating.**

					Per dozen
2½ oz. panels	-	-	Style 2	-	5/6
4 „ overton or lime	-	-	„ 1 & 2	-	6/-
5 „ panels	-	-	„ 2	-	8/6

*Handsome Showcard, mounted with real hair, as illustrated, with all Orders.*

### Bay Rum and Cantharides *Sizes and prices as above.*

We are now offering a greatly improved product in each case, the result of careful experiment and investigation; chemists are invited to write for a free sample for personal testing.

**ARTHUR H. COX & CO. LTD**  
Manufacturing Chemists  
**BRIGHTON ENGLAND**



# THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.  
LONDON E.C.4

FEBRUARY 13, 1926.

*This Supplement is inserted in every copy of The Chemist & Druggist.*

## THE CHEMIST AND DRUGGIST SUPPLEMENT

### REVISED ADVERTISEMENT TARIFF.

Businesses Wanted and for Disposal, Premises to Let, Goods for Sale, and Agencies—6/- for 50 words; every additional 10 words or less, 6d.

SITUATIONS OPEN—6/- for 40 words; every additional 10 words or less, 6d.

SITUATIONS WANTED—2/- for 18 words; every additional 10 words or less, 6d.

Legal Notices, Tenders, Auctions, and all specially-spaced announcements, 1/3 per nonpareil line (12 lines = 1 inch single column).

Miscellaneous (Wholesalers') Section for odd and second-hand lots—10/- for 60 words; 1/- for every additional 10 words or less.

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum 2/-.

### BOX NUMBER.

In each case replies may be addressed to a registered number or nom-de-plume, c/o this Office, at a charge of 1/- extra for each advertisement.

### PAYMENT.

All Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

THE CHEMIST AND DRUGGIST, 42 Cannon Street, LONDON, E.C.4.

Telephone: Central 3517 (3 lines).

Telegrams: "Chemicus, Cannon, London" (2 words).

## CLOSING FOR PRESS.

ALL ADVERTISEMENTS INTENDED FOR  
INSERTION IN THIS SUPPLEMENT

MUST REACH US  
NOT LATER THAN

FIRST POST THURSDAY MORNING.

## CHEMISTS' TRANSFERS.

Messrs. Orridge & Co., 56 Ludgate Hill, E.C.

Telephone No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuation.

1.—LONDON, W. (Good-class Suburb).—Old established Business, Retail and Dispensing; gross receipts average £2,000 yearly; excellent profits; well-appointed shop, fully stocked; rent moderate; held on lease. Further details on application.

2.—LONDON, S.W.—Middle-class Retail and Photographic Business; good opening for Panel Dispensing; returns last year, £1,115; net profit, £270; single-fronted shop, well fitted and stocked; large house; net rental, at present, £40 per annum; 19 years' lease; price, £750.

3.—CAMDEN TOWN.—Cash Drug Store; very old-established; returns, present rate £27 to £30 weekly; single-fronted shop; very good stock; six-roomed house, partly sub-let; rent £46; held on lease; valuation terms or lump sum offer entertained.

4.—LONDON, E.—General Retail and Photographic, with good opening for N.H.I.; returns, £1,100 at good prices; corner shop; good working stock; small living accommodation; rent, £55 inclusive; no near opposition; price £750.

5.—LONDON, N.—Cash Retail Business; returns between £2,500 and £3,000 per annum at fair prices; scope for further development; comfortable residence with private entrance; price £1,750.

6.—LONDON.—For Disposal, a Manufacturing Chemist's Business, showing a weekly turnover of £500; gross profit, 20 per cent.; terms, goodwill £1,000, stock and plant at valuation, in all about £6,000.

7.—LONDON, S.W.—Ready money Business; returns, under unqualified management, £25 weekly; lock-up shop; premises can be purchased if desired; price for business, £600.

8.—SOUTH COAST.—Middle-class Retail Business, at present conducted under unqualified management; returns last year exceeded £1,700 at good prices; double-fronted corner shop; excellent house; freehold may be purchased or lease will be granted. Further details on application.

9.—LANCASHIRE.—General Retail Business, with Wine Licence and small Optical connection; established 50 years; returns, £2,400, with scope for considerable increase; net profit, £600; small living accommodation; held on lease; valuation terms entertained.

10.—CUMBERLAND.—General Retail Business, with Kodak Agency; returns, last year, £1,705; net profit, £400; single-fronted shop, well fitted and stocked; rent, £35; practically unopposed; price, £850.

11.—LANCASHIRE.—Cash Retail, with Kodak Agency; good opening for N.H.I.; established 20 years; returns, between £700 and £800, scope for considerable increase; single-fronted shop; separate house, bathroom; total rent, 19s. weekly; price, £500.

12.—SOUTH WALES.—Cash Retail Business; established many years; returns, £1,000 per annum; gross profit, £400; single-fronted shop, well fitted and stocked; teeming population; price, £450.

13.—WESTERN COUNTY.—Light Retail and Dispensing Business; returns, £1,100 per annum, at good prices; corner shop; Vendor estimates stock and fixtures at £600; comfortable house; net rent and rates, £23; held on lease; price about £675.

14.—ESSEX (few miles out).—Ready money Business; returns, present rate, £25 weekly; scope for development under energetic management; comfortable residence; held on long lease; to effect a speedy transfer £750 would be accepted.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

## Valuations for Stocktaking

Messrs. O. & Co. are prepared to undertake these essential duties and make Special Terms for such service.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.4



# The Association of Mnfgr. Chemists

— LIMITED —

Business Agency Transfer and Valuation Department,  
Head Offices—Kimberley House, Holborn Viaduct, London,  
E.C.1 (and at 2 Bixteth Street, Liverpool)  
PARKIN S. BOOTH, Accountant and Valuer. Phone: City 1261-2-3

## BUSINESSES FOR DISPOSAL.

1.—SOUTH WALES.—Cash Retail Business in main street of good town; lease of 7 years at rental of £50 p.a.; returns, £30 p.w.; premises consist of good shop and five rooms, one of which is fitted as dark room and one as optical room; stock approximately £500; valuation terms. (23)

2.—S. DEVON.—Good-class ready-money Business in important town; returns, £30 p.w.; Kodak, N.H.I., etc.; d.f. shop, with 8-roomed house; price, including freehold property, £2,600. (14)

3.—SOUTH DEVON.—Very old-established Business in residential district of busy town; returns, £34 p.w.; rent, £90; lease to be arranged; double-fronted, well-fitted shop and house with 7 rooms; side entrance, store, etc.; price £1,450. (15)

4.—YORKS.—Cash Business, in main road, in important industrial town; 5 years' lease will be granted at £90 to £120 p.a.; returns, £30 per week; Kodak Agcy.; dwelling accommodation; price, goodwill, £450; stock, fixtures at valuation. (17)

5.—SOUTH COAST RESORT.—Cash Retail and Dispensing Business, situated on main road; premises consist of large lock-up shop, held on lease, 19 years to run at £170 per annum; handsomely fitted and good, saleable stock carried; returns, £2,000; scope for increase; price, £1,750, or stock and fixtures at valuation. Full particulars on application. (19)

6.—NORTHUMBERLAND.—Recently established Cash Pharmacy; Kodak Agency; lock-up shop; well fitted and stocked; returns average £14 per week; good opportunity for smart, energetic, qualified man. Full particulars on application. (36)

7.—LANCS.—Small Drug Stores; lock-up shop with room at rear; rent, 13s. 6d. per week, including gas; established 2 years; returns, £8 per week; can be considerably increased. Full particulars on application. (21)

8.—GLAMORGANSHIRE.—Cash Ret. and Disp. Business; premises consist of lock-up shop with room at rear; held on lease, 4 years to run at £50 p.a.; est. 20 years; well-fitted; good stock carried; reason for disposal, ill-health; full pars. on appl'n. (22)

9.—YORKSHIRE.—Retail Dispensing Business; established 12 years; premises consist of shop and room at rear, two bedrooms above; lease 5 years; conveniently fitted and well-stocked; returns, £1,905; price for quick sale, £790. (26)

10.—PRESTON (7 Miles from).—Old-established Drug Stores; in present hands 29 years; premises consist of double-fronted shop, 5 store-rooms and yard, with 6-roomed house adjoining; well fitted and excellent stock carried; returns average £18 per week; great scope for qualified man; price, including property, £2,200. Further particulars on application. (37)

11.—SURREY.—For immediate Disposal, Drug Stores; est. 20 years; d.f. shop with room at rear; well-fitted and stocked; lease would be granted; returns, £1,000 p.a.; all ready money; good scope for qualified man; price, £900 or near offer. (27)

12.—LANCS.—Retail Chemist; corner shop; well populated district; takings over £25 per week, now £14; N.H.I. £4 per week; rent, £60 p.a.; lease will be granted; full wine licence without restrictions; stock, £4,500; fixtures, £200. (30)

13.—BRIGHTON.—For immediate disposal, Cash Drug Store, lease 12 years; rental £52 p.a. inclusive. Premises consist of lock-up shop, well fitted and stocked, electric light. Good scope for qualified man. Reasonable offer accepted for quick sale. Full particulars on application. (28)

14.—YORKS.—High-class Pharmacy; returns average £6,000 p.a., all ready money; old established; lease 6 years; possibility of renewal; stock value £2,600 without fixtures; premises consist of large double-fronted corner shop, side door, and yard with separate entrance, 6 large rooms, 2 large cellars and dark room; rent £250 p.a.; price for stock, fixtures and lease, £3,000. (35)

15.—LONDON, S.W.—Cash Retail Dispensing Business, centrally situated; premises consist of lock-up shop, with store room above; held on lease, approximately 13 years to run; rental £100 p.a.; returns approximately £50 week, all ready money; established 110 years; price for quick sale £2,000. Full particulars on application. (38)

16.—DARLINGTON.—For immediate disposal, Retail Cash Pharmacy; established six years; returns, approximately £1,000 p.a.; premises consist of lock-up shop, cellarage accommodation; held on half-yearly tenancy at £70 p.a.; reasonable offer considered for quick sale. Full particulars on application. (39)

Do you realise the importance of knowing the true value of your stocks and thus being able to arrive at the net working profit? We undertake this work for an inclusive fee at short notice. Chemists in the South, South Midlands, and South Wales, wishing to dispose of their business or desirous of obtaining particulars of businesses for sale, or inquiries as to valuation terms, are requested to communicate with Kimberley House, Holborn Viaduct, London, E.C.1.

Chemists in the North, North Midlands and North Wales, please write to 2 Bixteth Street, Liverpool.

# BERDOE & FISH

WILLIAM S. FISH.

VALUERS AND TRANSFER AGENTS,

41 Argyle Square, KING'S CROSS, W.C.1

(one minute from St. Pancras and King's Cross Stations.)

1.—BEDFORDSHIRE.—Sound light Cash Retail, in growing district; returns, over £2,000, increasing; good profit. Modern pharmacy; heavily stocked; price, £2,000; worth attention.

2.—CUMBERLAND.—Unopposed country Retail and Agricultural Business, with Kodak Agency; returns, £1,700; net profit about £400; lock-up shop, neatly fitted and well stocked; price, £850.

3.—GLOUCS.—Light Cash Retail, with N.H.I., in large industrial town; returns, over £1,000, scope for increase; modern fitted shop, with house; low rent; price, £550.

4.—CO. DURHAM.—Neglected Business, returning £900 under indifferent manager; plenty of scope; bandsomely fitted and well stocked; low rent; price, £650; less than valuation.

5.—LANCS.—Progressive Cash Business; returns, £2,400; net profit, £600; main road position; long lease; stock and fixtures worth £1,100; price, £1,500.

6.—SOUTHAMPTON (Near).—Profitable Retail and Prescribing, returning £1,500, under manager; plenty of scope; low expenses; price £950; also smaller concern; returns, £800; price, £500.

7.—MANCHESTER.—Well-established Drug Stores; returns, £25 weekly; splendid opening for N.H.I.; corner shop, with house; fully stocked; price £875.

8.—ESSEX.—Light suburban Cash Retail and Photographic; returns, £25 a week; scope for increase; modern well fitted shop; heavy stock; nice house; price for quick sale, £750.

9.—NORTH LONDON.—Old-established Light Retail, Prescribing and Kodak Agency; returns, over £2,700; good profits; audited books; main road position; plenty of scope; price, £1,750.

10.—LONDON, S.W. (Few Miles Out).—Good-class Drug Stores, in good position; returns, £1,000; splendid chance for qualified chemist; modern well-fitted pharmacy; well stocked; price, £750.

11.—LONDON, N.—Profitable Cash Retail, with N.H.I.; unopposed; returns, £1,660; gross profits, £700; low rent on lease; corner shop with house; price, £975.

ESTABLISHED 1870.

Telephone: 651 Museum.

## ERNEST J. GEORGE

Chemists' Valuer, Accountant and Transfer Agent.

Mr. GEORGE wishes to notify Pharmacists in London and district that a London Representative will on request (free of any charge or obligation) call and discuss any matters relative to STOCK-TAKING, ACCOUNTS, INCOME TAX, SALE or PURCHASE of BUSINESSES.

Enquiries should be addressed to—  
Mr. S. F. CLARK, 5 Pennard Road, London, W.12.  
Telephone: Riverside 4044.

3 ST. PAUL'S CLOSE - WALSALL

TELEPHONE 774 and 1000.

## BRETT & CO.

All valuations have the personal attention of F. J. Brett, M.P.S.  
TRANSFER AGENTS AND VALUERS,

73 LAUREL ROAD, LEICESTER. Telephone: 1934

### FOR DISPOSAL

£3,500 RETURNS, DERBYSHIRE.—Good Light Retail; very old established; good position; price £1,600.

£16 to £17 WEEK, DURHAM CO.—Branch; with personal attention can be doubled; price £650; less than value of stock and fixtures.

£800 RETURNS, LANCS.—General Light Retail; very much neglected; can be doubled; price £500.

£900 RETURNS, within 15 miles of GLASGOW.—Net profit £320; low rent; good chance for improvement; only obliged to sell on account of ill-health; price £500.

£1,000 RETURNS.—Branch Retail in large Midland town; can be much improved by personal attention; price, £550.

£900 RETURNS, near GLASGOW.—Very profitable; serious illness cause of sale; price, £450.

£17 to £18 PER WEEK.—Good middle-class district, N.W.; no near opposition; price, £475.

£2,200 RETURNS.—Light Retail, with Dispensing; South; lock-up shop, on long lease; price, £1,700.



**CHARLES C. MARSDEN**

Valuer, Transfer Agent and Stocktaker,

44 SHOLEBROKE VIEW, LEEDS.

**STOCKTAKING VALUATIONS AT SPECIAL REDUCED TERMS.**

Chemists own stock sheets priced out at low rates.

Recommended and approved by Messrs. Goodall, Backhouse &amp; Co., Hirst, Brooke &amp; Hirst, Ltd., &amp; Raimes &amp; Co.

**BUSINESSES FOR DISPOSAL.**

**BIRMINGHAM.**—For Sale, real genuine Chemist's Business on main road; residential district; 1½ years' lease at low rate, with good house attached (now let off); double-fronted shop, well stocked and fitted; owner retired; an opportunity seldom met with. All particulars may be had from John Shelley, Meter House, Wolverhampton.

**BERTS (Market Town, Main Street).**—Nucleus of old-established Business for Sale; has been neglected, but has done good business in the past; fine opening for smart man. Particulars of Edwin Watson, Auctioneer, Bishop's Stortford.

**LANCASHIRE.**—Desirable Retail Dispensing Business; Kodak, Wine Licence; profits about £400; price £1,200; property can be acquired for about £650. "Alpha," c/o Southall Bros. & Barclay, Ltd., Chemists' Valuers, Birmingham.

**LIVERPOOL.**—Large imposing corner Pharmacy, with freehold property, in densely populated district, for sale; heavily stocked; perfectly fitted; good business; would consider lease at weekly rental; other actual details only supplied at interview only, and not through the post; inspection invited; only genuine cash buyers need apply; owner leaving the town. 8/607, Office of this Paper.

**LONDON.**—Drug Stores; takings £11 weekly under neglected management; big scope for increase if personally supervised; densely populated neighbourhood; N.H.I. badly wanted; lock-up; rent, £32; long lease; good stock; £210 all at; part payment entertained. 280/29, Office of this Paper.

**LONDON, S.E.**—Drug Stores in busy neighbourhood; thickly populated; moderate rent; long lease; nicely fitted shop; living rooms; garden; energetic qualified man can easily do £5-£40 per week; gross profit, 35 per cent.; price, £525. 5/31, Office of this Paper.

**LONDON Suburb.**—Drug and Photo Store in good-class, growing neighbourhood; unique position; lock-up shop; rent £75, long lease; Kodak Agency; present returns averaging £1,400; N.H.I. or Dispensing; very profitable; few Patents, and good prices obtained; price, approximately £1,000; reasonable offer entertained. 5/28, Office of this Paper.

**LONDON, W.**—Very profitable Pharmacy; Kodak Agency; returns under manager about £5,000; books kept by incorporated accountant; long lease, about 25 years; important main road position; price £5,000. Reply 4/38, Office of this Paper.

**LONDON, S.W. (main road).**—Drug and Photographic Stores for sale, established 22 years; weekly takings about £17; qualified man could double takings; good house accommodation; long lease; rent, £65 p.a.; for quick sale will accept £450. Apply, "Aspirin," 272 Merton Road, Wandsworth, S.W.18.

**SCOTLAND.**—For Sale, Chemist's Business in popular summer resort; good Photographic trade; low price for quick sale. Particulars, 4/20, Office of this Paper.

**SCOTLAND (East Coast, near Edinburgh).**—Well-established good Dispensing and Photographic Business, along with property, for immediate sale; turnover £1,600; party going abroad. Apply 6/24, Office of this Paper.

**SOUTH COAST.**—To a young Chemist with limited capital an opportunity is presented to acquire a business on favourable terms; owner retiring. 9/21, Office of this Paper.

**SOUTHPORT.**—High-class Dispensing Business. For further particulars to genuine buyers apply Cumming, 20 Norwood Avenue, Southport.

**WEST MIDLANDS (market town).**—Old-established Cash Retail; takings averaging £40 weekly; large D. and P. connection; modern double-fronted shop; large house; ample storage; opening for Optics; heavily stocked; £2,500. 6/27, Office of this Paper.

**WEST OF ENGLAND.**—Thoroughly genuine Cash, Light Retail Business, with N.H.I.; well stocked; returns (3 years' average), £1,950; profits, about 36 per cent.; rent, £48, less appointment one afternoon weekly, 6s.; cash buyers only; price, £1,800; large house; photography practically untouched; real opportunity for young energetic man. 8/35, Office of this Paper.

**WILTSHIRE.**—Two Businesses for Sale, together or separately, £850 and £650; the Government developments (£2,000,000, being spent) ensure each business doubling turnover and profits very quickly; 800 more soldiers expected soon; good class; well fitted; opposition 9 miles away, with one exception; lovely district, golf links, etc.; near offers considered; owner studying for medical. Slack, 97 Yarrowburgh Street, Manchester.

**YORKSHIRE COAST (health resort).**—Good-class Retail and Dispensing Business, in growing residential district; scope for considerable increase; large shop, well fitted, and very well stocked; rent, £60; held on lease; good reasons for disposal; price to be arranged, about £1,000. 8/27, Office of this Paper.

**A**N opportunity occurs to acquire unopposed Chemist's Business in attractive country district and developing neighbourhood on main road 29 miles north of London; average yearly returns last 3 years £756; lock-up shop held on lease £26 per annum inclusive; Prescribing, N.H.I., Kodak Agency; price £350, or near offer. 9/17, Office of this Paper.

**BRANCH.**—Old-established Chemist's Business, corner position, main road of important city; fine imposing shop, beautifully fitted both inside and outside; returns last year £1,864; good profits; fully stocked; very low rent, on lease; absolutely genuine; open to any investigation; books kept; splendid opportunity for proprietor; fullest particulars on request (in confidence); price £1,400, or nearest offer for quick sale. 6/25, Office of this Paper.

**DRUG STORE.**—£450 or near offer (lock-up shop), including stock, fixtures, etc., option of 21 years' lease, in large residential good-class London suburb; attractive main road position; fitted electric and gas; takings average £10 per week under unqualified management. 4/33, Office of this Paper.

**DRUG Store,** in thickly-populated residential district; unopposed; scope for N.H.I., Photographic, etc.; fitted electric light, gas; every convenience; illness sole cause of sale; accept for stock, fixtures, fittings, £275, or offer for immediate disposal, worth double this amount. "Chemist," 72 Tredegar Road, Bow, E. Phone: Clissold 7144.

**DRUG Stores** for disposal in S.E. of London; densely populated working-class district; 5-roomed house, yard, with garage and stable; 3 rooms shortly vacant; 6 years lease; N.H.I. badly needed; sublets almost cover rent. 8/15, Office of this Paper.

**FOR** immediate disposal, old-established, well-fitted and stocked Pharmacy, with Photography, in densely populated district (Lancashire); exceptional scope for N.H.I.; excellent position and living accommodation; valid reason for disposal; immediate opportunity for energetic man now; a sound bargain; only wants seeing; price, £850; particulars. 8/4, Office of this Paper.

**FOR** Sale, recently established (nine months) Pharmacy in North of London, situated in main street, buses and trams pass door; densely populated area; quick cash trade; average takings, £25 per week; 250 N.H.I. prescriptions a month; 5 years' lease at low rental, £50 per annum; eight rooms over pharmacy; sublet at £2 7s. 6d. per week; electric light, telephone, every convenience to do large business in near future; Kodak Agency; scope for optics; would suit middle aged married chemist; stock and fittings valued at £275; price for quick cash transfer, £550. Apply, with references, to Williamson, 52 Stockwell Park Crescent, S.W.9.

**SMALL** lock-up Drug Store for Sale very near large West London station; splendid opportunity Photography, Kodak Agency; nicely fitted oak, electric light, telephone; suitable branch or young unqualified man; price, £250; stock at valuation optional. 8/5, Office of this Paper.

**WHOLESALE CHEMISTS.**—For Sale, valuable Agencies for Ozone Preparations, also Stock and Propaganda, property of Electrozone Co., Ltd. (in voluntary liquidation). Apply Desmond Page & Adams, Accountants, 13 Victoria Street, S.W.1.

**UNOPPOSED** Pharmacy for Sale in Leicestershire; population 3,000; large double-fronted shop, with modern plate-glass windows; splendid living accommodation, stable, garage, and small garden; rent moderate; takings £23 per week, and increasing; no Photographic, but splendid opening for same; bargain; price £750; cash only. "C. T.," 5/2, Office of this Paper.

**PATENT FOR DISPOSAL.**

**THE PROPRIETOR** of the Patent No. 176,271, for "An Improved Dentrifice," is desirous of entering into arrangements by way of licence and otherwise on reasonable terms for the purpose of exploiting the same and ensuring its full development and practical working in this country. All communications should be addressed in the first instance to Haseltine, Lake & Co., Chartered Patent Agents, 28 Southampton Buildings, Chancery Lane, London, W.C.2.



## SALES BY AUCTION.

**Re L. & C. Streek.** By Order of the Trustee and other Estates. Removed from Woolwich, Wembley, Olympia, and elsewhere for convenience of sale.

### B. NORMAN & SON

will Sell by Auction at their Sale Rooms,  
5 Little Britain (close to G.P.O.), E.C.,  
Wednesday, February 24, at Twelve,

**CHEMISTS' AND DRUGGISTS' FITTINGS & SHOWCASES,** including Dispensing Counters and Screens, Druggists' Labelled Nests of Drawers, Wall Fittings and Recess Mirrors, Chemists' and Perfumers' Mirror-lined and other Wall Showcases, Counters with slope front and mirrored doors at back, all Plate-glass Counters, Silent Salesmen, and Centre Showcases, Plate-glass Shelves, Cash Desks, and Tills, Office Furniture, Safes, Type-writers, Linoleum, Chairs, etc.

On View Day Prior.

Catalogues of the Auctioneers as above.  
Telephone: Central 6463 (2 lines).

## BUSINESSES WANTED.

**ADVERTISER** wishes to Purchase at once a good Business with living accommodation; Mixed Business not objected to; cash available. Full particulars to F. Jessop, Wyndley, Gnosall, Staffs.

**B**USINESS required, Lancashire or Derbyshire district preferred, but not essential; returns about £1,500; no objection to a small or neglected shop if capable of increase; would entertain Managership with view to early possession; to avoid unnecessary correspondence please give (in confidence) full particulars in first letter; interview. Write 5/37, Office of this Paper.

**W**ANTED, in or near London, Chemist's Business or Drug Store in busy district, main road; scope for increase essential. Replies (in confidence) to 7/19, Office of this Paper.

## AGENCIES.

**SCOTLAND.**—Well-known and old-established firm of Manufacturers' Agents are open for an additional good Proprietary; only advertised lines considered; splendid connection with Retail and Wholesale Pharmacists; five travellers on the road and good warehouse accommodation. 79/631, Office of this Paper.

**THE DEVON CHEMICAL COMPANY,** 36 Brick Lane, London, E.1, requires Buying Agents in the provinces for a new Coal Tar and other attractively-packed Medicated Bath Salts, retailing at 4d. upwards; dependable goods that bring regular repeat orders, are satisfactory to handle and highly profitable to both Agent and Retailer.

**SALESMAN,** well-introduced Northern Counties, requires additional Agency, upon part expenses and commission terms. Offers to 3/15, Office of this Paper.

## PREMISES TO LET.

**PORT TALBOT, SOUTH WALES.**—Shop, with living accommodation, main street, to Let, occupied as Chemist's Business for over 30 years. Apply Byrgess, 1 Devonshire Place, Port Talbot.

## FOR SALE.

**MAHOGANY** Glass Sponge Case, 36 in. x 24 in.; Farrows' Asbestos Filter, metal stand, complete, cost 90s.; elegant old Specie Jars, 30 in. high; offers; exchange. 6/23, Office of this Paper.

**MAHOGANY** Counter and Showcase, combined and separable, 10 ft. long, 2 ft. wide, 3 ft. high, backed mirrors and fitted with electric light, plate glass; cost £42, will accept first cheque £14 5s., carriage forward. Craingold, Chemist, Cheetham Hill Road, Manchester.

**NEST of Drawers** (34), mahogany, 7 ft. by 2 ft. by 9 in. deep, £6; Postal Boxes, metal edge, for liquids, 6½ in. x 2 in. deep, 20 gross for Sale cheap. J. Brodie & Co., 41 Museum Street, W.C.1.

## APPRENTICESHIP.

**APPRENTICE** required; good opportunity for learning Dispensing. Apply at 63 Bow Road, E.3.

## PREMISES FOR DISPOSAL.

**GOLDERS GREEN.**—Corner Shop Premises, suitable Dispensing Chemist; rent, £275 per annum, including residential upper part; freehold if desired. Ernest Owers, Ltd., Estate Offices, Golders Green, N.W.11.

## PARTNERSHIPS.

**PARTNERSHIP** wanted in London Wholesale and Manufacturing Chemists by Advertiser having Pharmaceutical, technical and office experience. Principals only, reply to "Wholesale," 72 Leo Street, Old Kent Road, S.E.15.

## FINANCIAL.

**A** LIMITED number of Pharmacists are invited to co-operate with owners of several high-class, unique Proprietaries, essentially suitable Chemists' trade, by becoming Shareholders with privileges. Amount of investment a matter of personal choice, but any sum from £100 eligible. Full particulars sent on application. 7/24, Office of this Paper.

## SITUATIONS OPEN.

### RETAIL.

### [HOME.]

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**BRADFORD.**—Qualified Assistant wanted for March 1; some knowledge of Photographic goods essential; good-class business; state age, references, and salary expected, to 8/17, Office of this Paper.

**BRISTOL.**—Qualified Assistant required for middle-class business; duties nominal; comfortable berth for elderly, active man; applicants should have good Counter experience, preferably with some knowledge of Photography; qualified lady would be entertained. Full particulars, stating salary required, in first letter, V. C. Mee, Ltd., 119 Bell Hill Road, Bristol.

**CROYDON.**—Experienced Assistant required, 25-30, able to take charge; qualification not necessary; must be quick and accurate Dispenser, good Window-dresser; one used to brisk cash trade; knowledge of Photography; progressive salary to good all-round man. Apply, with full particulars, 7/27, Office of this Paper.

**DERBYSHIRE.**—Qualified man to manage small branch; honest worker required; results paid for; salary to commence £4; good general experience and some knowledge of Photography necessary. Apply, with recent references, to Latham, Shirebrook, Derbyshire.

**EASTBOURNE.**—Wanted, qualified Assistant (male), mainly for Front Counter, for high-class Dispensing and Retail business, with Photography. State salary (outdoors), with usual particulars and enclose photograph, to H. R. Browne, 1 Cornfield Road, Eastbourne.

**HAMPSTEAD.**—Wanted, a young qualified Assistant (male) of good address and accustomed to high-class Dispensing and Family business. Apply, with full particulars, Grant, 567 Finchley Road, N.W.3.

**LEEDS.**—Young lady Dispenser (Hall) required to assist at Dispensing and Counter. Apply, with full particulars, to A. Rothstein, Pharmaceutical Chemist, 101 North Street, Leeds.

**LONDON.**—West End and City; qualified men, experienced, capable of taking charge; smart Salesmen; permanency; outdoors. Apply, stating age, height, experience, references, salary expected, and enclose photo (returned), Cofman's Pharmacy, 129 Baker Street, London, W.1.

**LONDON (City).**—Unqualified Assistant required; must be a good Counterman and Dispenser; permanent and progressive post to a satisfactory man. 6/190, Office of this Paper.

**LONDON, N.W.1.**—Smart qualified man wanted to manage Branch; high-class trade; good opening. Full particulars to 79/636, Office of this Paper.

**LONDON, S.E.**—Qualified Assistant (outdoor) required for Dispensing and Photographic business. Apply, with full particulars and stating salary expected, to A. Goldthorpe, Chemist, 113 Plumstead High Street, S.E.18.



**LONDON, S.E.**—Unqualified Assistant wanted (outdoors) for quick Cash Retail; reliable, good Counterman and Window-dresser; no late Thursday or Sunday or holiday duty. Apply Brooks corner of High Street, Broadway, Deptford, S.E.14.

**LONDON, S.E.** (near London Bridge).—Gentleman or lady required as cover in small business; age immaterial; light duties. Please state full particulars and lowest terms to P.C.B. 85/8, Office of this Paper.

**LONDON, S.W.19.**—Lady, qualified, for N.H.I. Dispensing and Counter; no Sundays; comfortable berth. Apply, stating age, height, experience, and salary required, and if disengaged. P.C.B. 85/7, Office of this Paper.

**LONDON (South-West).**—Required immediately, a Qualified Manager of proved ability and highest integrity for good-class Family and Dispensing Business; good salary to suitable man. Apply The Lion Drug Stores, Ltd., 75 West Street, Brighton.

**LONDON, W.**—Junior Assistant wanted; unqualified; Dispensing, Counter, and Photographic (latter not essential); outdoors; permanency to suitable man; apply, stating salary, etc., photo if possible, which will be returned. Gover, 88 Askew Road, Shepherd's Bush, W.12.

**LONDON, W., SUBURB.**—Manager required for small neglected Branch, Cash Retail, Kodak, and N.H.I. business; must be tactful Salesman, window-dresser, and Prescriber; commission given on own proprietaries and on increased turnover. Apply, stating age, experience, salary required, etc., to 9/23, Office of this Paper.

**MANCHESTER.**—Smart Assistant wanted for Counter and Dispensing; must be keen Salesman and good Window-dresser; knowledge of Photography an advantage. Apply, with full particulars, to H. Epstein, 161 Bury New Road, Manchester.

**MIDLANDS.**—Capable and energetic Scotsman (married) to take entire charge of an up-to-date business requiring personality and tact; very lucrative agreement offered to the right man. 6/191, Office of this Paper.

**NEAR London.**—Qualified Junior for Country and Suburban Business; good references to character and capabilities requisite. Particulars of experience, salary and photo to H. England, "Lashams," 1-3 High Street, Romford. Phone: 505.

**NORTH STAFFORDSHIRE.**—Gentlemanly Assistant, unqualified, required for March 8; must be an efficient Counterman, energetic and trustworthy, well up in Photography, and good Window-dresser. State experience, age, salary required, with copies of references, to Oxens, Chemists, Newcastle, Staffs.

**OXFORD.**—Messrs. Dolbear & Goodall, 108 High Street, Oxford, require a Book-keeper Assistant; knowledge of book-keeping and good handwriting essential. Give full particulars, experience and salary required; outdoors.

**SOUTH DEVON.**—Required shortly for an old-established business in important town, a young Qualified Junior of good appearance and address, with sound Dispensing experience and some knowledge of Veterinary Medicines (preferred). Full particulars of salary (outdoors), experience, and photo, if possible, to 8/7, Office of this Paper.

**SOUTH WALES.**—Wanted, immediately, Junior Assistant; outdoors; late assistant just qualified; time for study if required; short hours; opportunity for good experience; interview preferred; applicants must furnish undeniable references. Kirkland, Crickhowell, Breconshire.

**SOUTH WILTS.**—Assistant required, March 10, qualified or unqualified, young and energetic, to relieve proprietor; country business; capable Dispenser, Counterman, and Photographic; progressive salary to a conscientious man. Full particulars, including salary required (outdoors), with copies of recent references. "Pharmacist," 9/5, Office of this Paper.

**WEST OF ENGLAND.**—Qualified lady, chiefly for Dispensing, but with good knowledge of Counter Work; easy hours. Full particulars first letter; photo if possible, which will be returned immediately; interview could be arranged. 7/30, Office of this Paper.

**BOOTS THE CHEMISTS** have vacancies for experienced qualified and unqualified Retail Chemist Assistants. Apply by letter to Boots Pure Drug Co., Ltd., Retail Staff Department, Station Street, Nottingham.

**CAPABLE** qualified Manager wanted, Manchester district; must be up to date in all branches and thoroughly reliable; age 30-40; position offered where ability is not only appreciated but paid for, none but a business builder need apply; salary, £312, plus commission per annum. 9/5, Office of this Paper.

**DOCTOR (S. Midlands)** requires lady Dispenser (just qualified would suit), under 25. State age, height, references, salary required (outdoors), photo (stamp for return), denomination, etc. 7/39, Office of this Paper.

**EXPERIENCED** Assistant required for March 15; accurate Dispenser essential. Full particulars, together with salary required (outdoors), in first letter. Thorpe, Chemist, 127 Killinghall Road, Bradford, Yorkshire.

**EXPERIENCED** Assistant required for small country town; qualification not essential; good Counter-hand, with knowledge of Photography; personal interview will be required. Apply with fullest particulars, salary required, and when at liberty, to "Credic," 6/30, Office of this Paper.

**J. WEARING**, Pharmacist, Woking, requires capable, Unqualified Assistant; must be accurate Dispenser and energetic worker and produce recent references. State full particulars as to salary required, etc. This is an outdoor berth. Applications not answered in 6 days respectfully declined.

**JOHN BARKER & CO., LTD.**, Kensington High Street, require qualified and unqualified male Assistants; progressive positions; must be keen Salesmen and possess thorough knowledge of their business. Apply personally, or in confidence by letter, stating age, salary required, and full particulars of experience, to Staff Manager, 38 Kensington Square, W.8.

**JUNIOR** wanted, gentleman, age about 20; must have served good apprenticeship, and be accustomed to high-class Dispensing and Retail. Apply, by letter, to Alfred Allechin & Co., 9 Royal Parade, Golders Green, N.W.11, or phone Speedwell 3285 for appointment.

**JUNIOR** or Improver, about 20, must have had a good education and training, for business in N.W. district. Apply, with full particulars, to 79/633, Office of this Paper.

**JUNIOR** or Improver for good-class Retail and Photographic. Apply, stating age, experience and salary required (outdoors), to Frank Kirkby, Sutton-on-Sea, Lincolnshire.

**JUNIOR** Assistant wanted at once for good-class Dispensing Business. Please state age, height, experience and salary (photo if possible). Benjamiu, Chemist, 57 Cold Bath Road, Harrogate.

**LADY (Minor)** required, Dispensing, Counter and Photographic; good general experience and references essential. Full particulars, salary required and photo if possible, to Constance M. Joyce, The Ashby Square Pharmacy, Loughborough, Leics.

**LADY** Assistant, unqualified, but with some previous experience, for Counter and Book-keeping; one who could give a hand with Dispensing if required; state experience, age, and salary required. J. & H. A. Averill, Chemists, Stafford.

**MANAGER** (qualified) wanted for high-class Family and Dispensing business in N.W. district; must have had good West-End experience; salary £6 and commission. Only men with first-class references need apply, with full particulars, to 79/632, Office of this Paper.

**MANAGER** (qualified) wanted by Store Chemists, London district; age 25-40; accustomed to good Counter trade and Dispensing, with some knowledge of Photography; good and reasonable prospects. Photograph with fullest particulars to 79/634, Office of this Paper.

**NURSE-DISPENSER** wanted by firm of three Doctors; Hall Certificate sufficient, C.M.B. if possible; good references essential; state age, experience, and salary required; duties light, and applicant to live out; regular dispenser kept. Bullmore, Butterworth & Parker, Wisbech, Cambs.

**PART-TIME.**—Junior, with Dispensing experience, required for evenings (except Thursday) from 5.30, Saturdays from 1.30, and occasional Sunday evenings; two full-time assistants kept. Apply, stating full particulars of age, experience and salary required, to "C. B.," 20 New Street, Dorset Square, N.W.1.

**PHARMACIST**, age about 26; indoors; single; good-class country business, South Hampshire. Applicants must state past experience and salary required; photo if possible. 4/40, Office of this Paper.

**QUALIFIED** Assistant for good-class Retail; capable Counterman and modern Window-dresser essential; good living accommodation provided for suitable applicant. Please give full particulars first letter as to experience, age, salary required. Maunders Bros., Chemists and Opticians, Taunton.

**QUALIFIED** Manager (Minor) wanted for branch shop, London, W.; £2 10s. a week, four rooms, electric light, gas, commission over certain amount; good prospects for steady, reliable man. 7/1, Office of this Paper.

**QUALIFIED** Lady Dispenser required. Apply by letter, enclosing copies of testimonials, to Drs. Gardiner-Hill & Briggs, Horse Fair, Banbury.

**QUALIFIED** man wanted for good-class Family business; thoroughly experienced in all branches of Pharmacy, and competent to manage when necessary; one with view to purchase in near future; give all usual particulars. 8/25, Office of this Paper.

**QUALIFIED** Manager wanted at once in Birmingham; good opening for live man with initiative; living accommodation available. Full details in first letter to "S. W.," 306 Edward Road, Edgbaston, Birmingham.



**SMART** qualified Manager required for city business in Yorks (East); age 30-40; must be a first-rate Salesman and Window-dresser; interest in the profits offered to a really live man. 6/19, Office of this Paper.

**UNQUALIFIED** Junior Assistant, male, 22-30, required at early date; quick and reliable Dispenser, N.H.I.; knowledge of Photographic; take charge; Sunday evening one in three; good references. Apply Hines, Chemist, 86 High Street, Whitechapel, E.1.

**UNQUALIFIED** Assistant wanted for good-class Dispensing Business; three assistants kept; must be quick and accurate Dispenser; undeniable references. Apply, stating salary required and other particulars, to Graham, Chemist, 10 Station Parade, Willesden Green, N.W.2.

**WANTED**, reliable Assistant, London, S.W. district; Dispensing, good knowledge Photography, Window-dresser; state salary. Apply 7/8, Office of this Paper.

**W. H. DIXON & SONS, LTD.**, High Street, East Grinstead, require a capable, qualified male Assistant, chiefly for Dispensing; age 30 to 35; must be quick and accurate; permanency to suitable man; outdoors. Give full particulars and send photo, which will be returned.

**£4** 15s. per week and commission; advance in six months to good man; London experience preferred; London; good manner and capable of improving business. P.C.B. 85/19, Office of this Paper.

### WHOLESALE.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**A**N unique opportunity presents itself for four experienced Representatives (two for Lancashire, one for Cheshire, one for Derbyshire) to call on the trade for orders for Drugs, Sundries and Toilet lines; to the successful applicants for one month's trial small salary and commission will be paid, afterwards good salary and bonus will be given. Reply, by letter, to Medical Sundries Co., 32 Bridge Street, Manchester.

**C**HEMIST, preferably qualified under Pharmacy Act, to undertake management of Chemical and Pharmaceutical Laboratories; must be a practical man with previous experience. Apply, with full details of age, experience, salary required, to 79/623, Office of this Paper.

**E**XPERIENCED and reliable Charge Hand, capable of working pill and tablet plant with unskilled help, required in London; knowledge of Sugar and Pearl Coating essential; good opportunity for right man. Apply 79/635, Office of this Paper.

**I**NVOICE Clerk (male), with a knowledge of Chemicals, about 20 to 25 years of age. Apply, by letter, stating experience and salary required, Hopkin & Williams, Ltd., 16/17 Cross Street, E.C.1.

**L**ADY Assistant required by London Wholesale House for determining spirit strengths of alcoholic preparations for Customs purposes; must be a reliable and accurate worker. Apply by letter, giving full particulars, to "S. H.," 79/625, Office of this Paper.

**M**ANUFACTURERS of high-class Face Creams and Powder require Representatives on good commission basis for London and suburbs, Southern Counties, Home Counties, North Midlands and Yorkshire, South Wales, Western Counties, Ulster. Details of experience to Box 172, Samson Clark & Co., Ltd., 57 Mortimer Street, London, W.1.

**M**ANUFACTURING Chemists require Works Foreman with some knowledge of Chemistry and experienced in handling mixing, packing and conveying machines, despatching and general factory organisation and office routine. Full particulars and salary required to 79/627, Office of this Paper.

**R**EPRESENTATIVE required to travel in S.E. Counties; must have had Pharmaceutical training and possess good knowledge of Drugs and Preparations; preference given to qualified man about 30 years of age; good address and unimpeachable character essential; salary and proportion of profits; minimum sum guaranteed. 4/39, Office of this Paper.

**R**EPRESENTATIVE already calling on Doctors in London with time available for introducing Medicated Soaps. Full particulars (in confidence) to 79/626, Office of this Paper.

**R**EPRESENTATIVE wanted for Midlands by a Yorkshire firm of Wholesale Manufacturing Chemists. In applying state full details. 79/637, Office of this Paper.

**T**OILET and Perfumery House require Representatives to carry modern lines in following territories, South Coast, Wales; small salary and liberal commission paid to first-class men who must be already representing one non-competing house. 79/630, Office of this Paper.

**T**RAVELLER wanted; experienced in calling on Hairdressers and Chiropodists in London area, to introduce the "Bacterol" Preparations for quickly and cheaply clearing up scalp troubles, and also to sell the Bacterol Sterilising Cabinets already adopted by many hairdressing establishments, including some of the best known. State salary and commission required and full particulars (in confidence) to "Director," Bacterol, Ltd., 19/25 Brookside Road, Upper Holloway, N.19.

**T**RAVELLER required with good connection amongst Farmers in Central Welsh district, willing to add a Veterinary series. Communicate, giving full particulars, 78/605, Office of this Paper.

**T**RAVELLERS required, live keen men, to carry high-class Proprietary Remedy; all counties; good connection Chemists and Grocers essential. Terms, full particulars, and ground covered to 79/628, Office of this Paper.

**W**ANTED by old-established firm of Essence Distillers for Northern Counties, experienced Representative (Chemist preferred) accustomed to call upon Aerated Water Makers, Bakers and Confectioners, etc. State age and full particulars of experience. 79/629, Office of this Paper.

### [COLONIAL, INDIAN AND FOREIGN]

**S**OUTH AFRICA.—Wanted, qualified Pharmaceutical Chemist as Laboratory Manager; single; age about 30; state qualifications, detailed record, with copies testimonials; 3 years' agreement, £360, £420, £480; passage paid. "G.," c/o Davis & Soper, Ltd., 54 St. Mary Axe, London, E.C.3.

**W**EST AFRICA.—Required for the Gold Coast, qualified Chemist with some experience as Assistant; age 23-27; single; first class passage paid; good prospects to suitable man. Apply, stating full particulars, to Secretary, African and Eastern Trade Corporation, Limited, Kingsway, London.

### SITUATIONS WANTED.

#### RETAIL.

#### [HOME.]

**A** CAPABLE Assistant (referred), 28, careful Dispenser, good Salesman; accustomed to responsibility; excellent references; temporary or permanency, with possible preferment when qualified. Gregory, 337 Camden Road, N.7.

**A** CAPABLE, conscientious, qualified Manager; disengaged February 22; London or suburbs; Scotsman. "Aspirin," 61 West Ham Lane, Stratford, E.15.

**A** CAPABLE Junior (23), tall, unqualified, 8 years' experience, Counter, Dispensing, Photo., etc., desires post; London preferred; excellent references; free end of February. 7/29, Office of this Paper.

**A** QUALIFIED Chemist, age 27, energetic, desires situation in good-class Dispensing and Retail business in London or suburbs. Apply 4 Albert Road, Bexhill.

**A** TALL, energetic, middle-aged gentleman, unqualified, good all-round experience, excellent references, seeks engagement; permanency or Locum; Midlands preferred. "Chem," 4 Repton Road, Bordesley Green, Birmingham.

**A** PPRENTICESHIP; Secondary School boy (17); passed Preliminary; live out; S.W. London or W. Surrey. 4/35, Office of this Paper.

**A** S Manager, qualified, for working up neglected branch; doubled turnover in six months last; good personality; 38 years; salary and commission on increase and prescribing. 8/18, Office of this Paper.

**A** SSISTANT, 5 years' experience, unqualified, age 21, Dispensing, Photo., Salesman, Window, desires position, Liverpool district; salary £2. 6/22, Office of this Paper.

**A** SSISTANT; unqualified; experienced in all branches of the trade; temporary or permanent; good reference. P.C.B. 84/28, Office of this Paper.

**A** SSISTANT, unqualified, excellent references, Locum or permanent; good Counterman; ex-Serviceman. Apply Hobbs, 4 Woodville Gardens, Golders Green, N.W.

**A** SSISTANT, male, unqualified, excellent all-round experience, Dispensing, Counter, permanency, desires post, seaside town or inland health resort; first-class references; interview London any time. A. D. Jones, 10 Barclay Road, Walham Green, Fulham, S.W.



**ASSISTANT**; good Salesman, experienced Dispenser, Photographic, Prescribing, etc.; relief or part-time; London area preferred. P.C.B. 85/6, Office of this Paper.

**ASSISTANT**, unqualified, 34, experienced Dispensing, Counter, Stock-keeping, seeks berth, London or suburbs; excellent references; disengaged. Chivers, 57 Danby Street, Peckham, S.E.15.

**ASSISTANT**; middle-aged; skilled Dispenser; just disengaged; highly recommended; accustomed to take charge; would undertake temporary work. Smith, 4 Brunswick Road, Kingston Hill, Surrey.

**ASSISTANT**, 33; unqualified; good all-round experience; willing and obliging. "E. S.," c/o 2 Woodbury Road, Hawkhurst, Kent.

**ASSISTANT**, 34, unqualified, seeks engagement; 12 years' experience, London and provinces; good-class Retail, Dispensing and Photographic business, South Coast (Hastings district preferred), but not essential; disengaged end of March. Andrews, 44 Osney Crescent, Kentish Town, N.W.5.

**ASSISTANT** seeks permanency; 26; unqualified; passed Part I; high-class experience all branches; highest credentials; disengaged. Apply 8/9, Office of this Paper.

**ASSISTANT**, qualified, commanding appearance, desires post in London; conscientious; high-class experience; commencing immediately if necessary. 8/30, Office of this Paper.

**BIRMINGHAM**.—M.P.S., Manager, experienced, with excellent references for 12 years; Counter, Dispensing and Photography, age 34, tall, desires change; Birmingham or suburbs. Jefferies, 12 Robert Road, Handsworth, Birmingham.

**BIRMINGHAM** (or near).—Unqualified; young; nearly 7 years' all-round experience; now disengaged and available for interview. "Amylum," 812 Stratford Road, Sparkhill, Birmingham.

**BOOK-KEEPING**, etc.; evening work; disengaged after 5 p.m.; terms moderate. Reply "X. Y. Z.," 8/1, Office of this Paper.

**CAPABLE** and energetic Assistant, age 26, unqualified, requires situation; 7 years' experience in London and Brighton; highest references; moderate salary. "R. W.," 15 Dyke Road Drive, Brighton.

**CAPABLE** all-round man, unqualified, middle-aged, desires position, London; long experience. Morris, c/o Wingfield, Chemist, Hilderton Road, S.E.

**DISENGAGED**.—Qualified; whole or part-time, cover, Locum if required; moderate terms. "Pharmacist," 69 Elthorne Park Road, W.7.

**DISPENSER**, Lady (Hall); 18 months' experience Dispensing and Manufacturing, Bookkeeping (card system); doctor or institution; North preferred. 6/26, Office of this Paper.

**DISPENSER-BOOK-KEEPER**, middle-aged, desires post with Doctor; excellent references. "R. J. M.," 5 High Street Mansions, High Street, Shadwell, E.1.

**DRUG** Store Manager, Assistant or Locum; anywhere; just out of own business; thoroughly experienced; middle age; abstainer; married; excellent references; moderate salary. Carte, The Pharmacy, Rodley, Leeds.

**EAST LANC.**—W. Thornher, Chemist, Accrington, can thoroughly recommend Miss Savage, she having now completed her indentures and is at liberty to take post as Junior.

**EXPERIENCED**, capable, unqualified man, 28, of smart appearance and address, desires permanent position in high-class Pharmacy; testimonials will bear strictest investigation; interview, and commence almost immediately. 8/26, Office of this Paper.

**IMMEDIATELY**.—Elderly Qualified Chemist requires post as Cover; Lancashire or Yorkshire preferred. "Pharmacist," 138 Sussex Street, Broughton, Manchester.

**JUNIOR** Assistant (20); capable Dispenser, N.H.I., Photography, good Salesman; Midlands, Nottingham or Leicester preferred, not essential; state terms. "Hospital," 33 Wilton Road, Aston, Birmingham.

**JUNIOR** Assistant (20), tall, desires change to W. or S.W. London; 3½ years' high-class Dispensing and Counter experience; good Window-dresser and willing worker. Apply 7/9, Office of this Paper.

**JUNIOR** Assistant; age 20; 5 ft. 8½ in. in height; disengaged; references. Mitchell, 59a Klea Avenue, Clapham Park, S.W.4.

**LADY**, 30, refined, good appearance; 10 years' all-round experience in first-class Chemist; Perfumery and Toilet a speciality; London preferred. P.C.B. 83/26, Office of this Office.

**LADY** (Apothecaries' Hall) requires post with Doctor, Chemist, or preferably Chemist and Optician; three years in present place; good appearance; would like to get experience in optics. 7/18, Office of this Paper.

**LADY** Dispenser (Hall), experienced, requires post with Doctor, Chemist or Infirmary; London preferred. Harley, 60 Osborne Road, Forest Gate.

**LADY**, 23, disengaged, 8 years' Dispensing and Counter experience, requires situation, Birmingham district. Williams, 108 Victoria Road, Handsworth, Birmingham.

**LADY** Dispenser desires post, Doctor, Chemist; experienced (Hall) Window-dresser, Counter, Book-keeper; Locum or permanency. 31 Beeshorugh Street, Victoria, S.W.

**LADY** Dispenser (Hall), experienced Retail, requires post, North London; whole or part-time. "Medico," 19 Fernleigh Road, N.21.

**LADY** Assistant, unqualified, desires post in London; Counter, Photographic and Window-dressing; 8½ years' experience. 7/26, Office of this Paper.

**LADY** Dispenser-Book-keeper, partially qualified, desires situation with Doctor; Watford or near preferred; excellent references; shortly disengaged. 8/2, Office of this Paper.

**LADY**, pre-war trained; thoroughly experienced in all Pharmacy work, including London, W.; disengaged. 9/1, Office of this Paper.

**LANCASHIRE** or Cheshire.—Qualified, 39, tall, 23 years' all round, desires change; present Branch Manager; excellent references. 6/29, Office of this Paper.

**LOCUM** (unqualified) or permanency; take charge if required; experienced; age 40. Francis, 137 Lilford Road, S.E.5.

**LOCUM**; all-round experience, Dispensing, General, Photographic, Agricultural; disengaged February 9. J. G. Dance, 12 Bridge Street, Stratford-on-Avon.

**LOCUM** or relief; qualified; 33; experienced; excellent references; Photography, Books; London or suburbs. Findlay, 62 Lillie Road, Fulham.

**LOCUM**; disengaged till March 8; highest credentials. "Ferrim," 38 Central Drive, Blackpool.

**MANAGER**, M.P.S., F.B.O.A.; exceptional London and provincial experience; undeniable references; good business builder; permanency; or would entertain partnership or interest. 7/2, Office of this Paper.

**MANAGER**; 41; qualified; London, provincial and Colonial experience; sound references; Scotsman; single; disengaged; tall; active; good address. "Prescriber," 7/38, Office of this Paper.

**MARCH**.—Assistant; unqualified; 5 ft. 7 in.; 47; looks younger; reliable; energetic; quick Counter; references; Midlands. Grace, 47 Station Street, Macclesfield.

**M.P.S.**, 24, thoroughly experienced (West-End, seaside, suburban), desires permanency in high-class business, West-End or City. A. Oakley, 31 Knights Park, Kingston-on-Thames.

**M.P.S.**, 23, tall, energetic, with all-round experience, disengaged March 8, desires position, preferably in Lancashire. Apply "Pharmacist," 58 Serpentine Road, Egremont, Liverpool.

**M.P.S.**, tall, 33, as Manager; experienced all branches Retail; at liberty shortly. Apply "Pharmacist," 304 Garratt Lane, Earlsfield, S.W.

**MIDDLE-AGED** Hall Dispenser of many years' experience, now disengaged, seeks post, Manager of small Drug Store, Dispensing, Bookkeeping, etc.; good prescriber, good first-aid; accustomed no supervision. Mr. Riches, 52 Calverley Grove, Hornsey, N.19.

**MR. WEATHERILL**, of Hither Green, S.E.13, recommends his Apprentice for position as Improver; good experience in Dispensing, Counter and Photographic work; age 20. Reply to H. E. Johnson, Park Cottage, Enslin Road, Eltham, S.E.9.

**PART-TIME**, unqualified, age 24, requires three or four evenings a week; good Dispenser and Counterman; otherwise by arrangement. Rutherford, 32 Tremadoc Road, S.W.4.

**PART-TIME** work required by Minor Student (evenings); S.W. or W. district. Muriel Harris, 8 Kerrison Road, Ealing.

**P.H.C.** (23), high-class Counter, Dispensing, Photo and Optics, seeks situation. Melville, 22 Kingsland Road, Canton, Cardiff.

**PHILIP G. FRANK** desires situation as Improver; Yorkshire preferred, not essential; passed Preliminary; disengaged. 8 Windsor Terrace, Whitby.



**QUALIFIED** Cover disengaged 22nd; all-round experience; London and Provinces; excellent references. "Alpha," 52 Albion Street, Morley, near Leeds.

**QUALIFIED**; age 48; extensive knowledge in Dispensing, Prescribing, Veterinary requirements; excellent testimonials. Reply 4/36, Office of this Paper.

**QUALIFIED**, 26, West-End and Continental experience and Photography, seeks position as Senior or Manager; South Coast preferred. 1/14, Office of this Paper.

**QUALIFIED**, 23, desires position; free any time; usual references, etc. Clifford Hughes, 23 Carlton Avenue, Barrow-in-Furness.

**QUALIFIED** Lady (24) desires post, temporary or permanent; Dispensing and Counter work. 7/35, Office of this Paper.

**QUALIFIED** Lady Dispenser desires post with Doctor or Institution; good experience. 9/30, Office of this Paper.

**RELIEF** Manager at liberty; fully qualified. "Chemist," 31 Truscott Avenue, Bournemouth.

**UNQUALIFIED** (21); Dispensing, Optics, Window-dressing, Photographic; excellent references; energetic, obliging; disengaged March 8. Marsden, East Street, Lindley, Huddersfield.

**UNQUALIFIED**; single; disengaged; height 5 ft. 10 in.; 22 years' experience, Dispensing, Counter, Photography. Harris, 24 Link Road, Edgbaston, Birmingham.

**WELL-EDUCATED** Young Lady, qualified, requires position as Assistant to London Pharmacist; experience in good-class London business is desired. M. E. H. Curry, 45 Eversleigh Road, Finchley, N.3.

**WELSH-SPEAKING**, qualified, 26, desires post in N. Wales; seaside town preferred. 9/10, Office of this Paper.

**YOUNG** Lady Assistant, unqualified, all-round experience, desires situation with Chemist in small business; excellent references; disengaged March. 8/200, Office of this Paper.

### WHOLESALE.

**ADVERTISER** offers reliable Sales Representation in London; six years' successful experience; good personality; own car; first-class references. "Capsicum," 7/31, Office of this Paper.

**ADVERTISER**, with twenty years' experience in propaganda work with Doctors, also Chemists, desires to represent a first-class firm; excellent references; well known to specialists and G.P.'s in London and country. P.C.B. 85/11, Office of this Paper.

**AS** Representative; 30; tall; good appearance; associated Pharmacy 15 years; excellent credentials. Bowen, 70 Balfour Road, Portsmouth.

**CAPABLE** man requires a berth; many years' experience in Manufacture of Pharmaceutical Goods; accurate work to Formulae, Concentrated Mists, etc.; able to take charge of steam plant and do light running repairs; not afraid of work. Reply to 7/21, Office of this Paper.

**CHEMIST** requires post as Sales Manager or other position of control; experienced in food products; successful propagandist. "Kola," 9/24, Office of this Paper.

**DRUGS** and Packed Lines for Chemists; Traveller desires full representation; extensive personal connection. "Tragacanth," 7/7, Office of this Paper.

**EXPERIENCED** Representative (age 35), 14 years with leading London Houses, Druggists' Sundries, Packed Goods, Oils, etc., desires appointment; disengaged; well known Eastern, Home or Southern Counties; excellent references. 7/34, Office of this Paper.

**GENTLEMAN** (48), with long experience of Manufacturing, Wholesale and Export Chemist's business, seeks position with first-class house, or willing to represent firms having connections in Northern Europe, preferably Scandinavia. "F.," 32 Castleford Road, Sparkhill, Birmingham.

**LIVE** London Representative, calling on Retail and Wholesale Chemists, seeks good side-line on commission basis; own car. "Stickit," 7/310, Office of this Paper.

**LONDON** Representative, important Drug House, desires one side line; advertised Proprietary preferred. "H.," 4/23, Office of this Paper.

**MANAGER-TRAVELLER** for firm closing down, Surgical Rubber Goods, Sundries, is open for re-engagement; could transfer business connections; London, country; used to travelling. "S.," 32 Wymering Mansions, W.9.

**REPRESENTATIVE** open Re-engagement; 20 years' first-class experience; Chemists, Medical, Wholesale; excellent references. "Beta," 9 Rostrevor Road, Wimbledon.

### ALL PUBLIC PHARMACISTS

should join at once

**The NATIONAL DRUG & CHEMICAL UNION**  
incorporating the National Association of Chemists' Assistants)

**BENEFITS: Trade Protection—Legal Aid—Unemployment Benefit—Free Use of Employment Bureau.**

Write for particulars:—ARTHUR J. GILLIAN, Gen. Sec.  
149 Newington Causeway, LONDON, S.E.1

**REPRESENTATIVE** desires change to substantial hon which offers scope to ambitious man; sound connection Toilet, Fancy goods, Wholesale and Stores. "C. L.," P.C.1 84/29, Office of this Paper.

**YOUNG** man, age 25, desires position as Traveller in London (Toilet, Sundries, and Packed Goods); 10 years excellent experience and references. "P.," 3 Stanford Street Westminster, S.W.1.

### MISCELLANEOUS.

**MAHOGANY FITTINGS** (complete set).—Drugfitting, 14 long, 48 drawers; Wallcase, 10 ft. long; Dispensing Screens, 6 ft. and 7 ft. long; Glass Front Counters, 12 ft. and 10 ft. long; Counter Case, 5 ft. 4 in. long; Perfume Case a Desk; two nests Counter Drawers; also complete set Mahogany Fittings, cheap lots; Silent Salesman, 6 ft. high. Low price **GEORGE COOK**, Chemists' Fitter, 267 City Road, E.C.1.

**SECOND-HAND CHEMISTS' FITTINGS**.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, **RUDDUCK & CO** 262 Old Street, London, E.C.2.

**£135**.—**COMPLETE SET OF FITTINGS**.—Could easily adapted to fit almost any sized shop. A great bargain. 20 ft. Drug Fitting containing 144 drawers in lower part, with lockers and cupboards, glass cases and mirror poison cupboard and shelves in upper part; 15 ft. Counter with cases in front fitted glass shelves, drawers at back; 8 ft. W Show Case; Perfumery Showcase; 6 ft. very handsome Dispensing Screen; Counter Cases; Cash Desk; ready for immediate despatch. **PHILIP JOSEPHS & SONS, LTD.**, 93 Old Street London, E.C.1.

**FOR** Sale, Granulating, Sifting and Mixing Machine; will take 60 lbs.; electric-driven motor and driving belt included can be seen at work; used very little; sold for no fault. April 9/18, Office of this Paper.

### LIMITED COMPANIES REGISTERED.

—I have now been engaged in this work over 20 years, so you may rely that my experience in Chemist and other Companies (I take all trades) is hard to beat. Most reasonable and inclusive fee. Advice free.—**A. B. SLACK**, 15 Christ Church Avenue, West Didsbury, Manchester.

**3 CWT.** Eucalyptus Oil, B.P., 70-75 per cent., 1-cwt. 10 2s. 3d. lb., carriage paid U.K. **Holt, Green & Co.**, Byward Street, E.C.3. Phone: Royal 2765.

### EXCHANGE COLUMN.

2d. per word: Minimum 2s.

### FOR DISPOSAL.

**COMPLETE DENTAL OUTFIT**, Forceps, etc.; would exchange for Optical Trial Case. "S.," 104 Katherine Road, E.6. **SIX DOZEN**, or part, genuine Gillette Razors, each with blade, 8s. 6d. dozen, carriage paid; absolutely new, unsold. **Evans Company**, 17 Harwood Road, London, S.W.6.

### WANTED.

**SUPPOSITORY MACHINE** and Tube Filling Machine. For particulars, 34 Lady Lane, Leeds.

**MIXING MACHINE** for dry powders. Full particulars at lowest price to 79/624, Office of this Paper.

**GOWER**, Chemists' Bookseller, 41 Voltaire Road, Clapham wants Pharmaceutical Books and Students' Requisites.

**B.P. CODEX**, Hutchinson's "Foods and the Principles of Dietetics"; secondhand; state condition and price. 5/ Office of this Paper.

# Where Quality & Price Go Hand in Hand

---

Our policy and aim has always been—*quality first*; then, and then only, *price*.

We have never manufactured down to a price and never shall, but the ever-increasing demand for our products enables us to manufacture economically with the result that our prices are, to say the least, worth knowing.

Now as to our Manufacturing—It is worth putting on record that we apply searching tests for *purity* and *strength* to all our products.

Close attention to these important points, coupled with modern methods in manufacture, ensure the unvarying high standard of our pharmaceutical preparations.

*FURTHER, THE DIRECTORATE and MANAGEMENT ARE IN THE HANDS OF QUALIFIED AND WELL-TRAINED MEN THROUGHOUT.*

---

**HOUGH, HOSEASON & CO., LTD.  
MANCHESTER.**





THE BRITISH DRUG HOUSES  
LIMITED

## THE TWO 'BOROCAINES'

### The New Local Anæsthetics

which induce perfect local anæsthesia  
without the slightest risk of toxic effects.

#### 'BOROCAINE'

(Ethocaine borate)

supersedes all other local  
Anæsthetics for use in  
Dentistry, and all minor opera-  
tions requiring injections.

#### 'BETA-BOROCAINE'

(Benzamine borate)

supersedes all other local Anæs-  
thetics (including 'Borocaine') for  
producing surface anæsthesia.

'BOROCAINE' and 'BETA-BOROCAINE'  
are issued to the Medical and Dental Professions  
through the Pharmacist, who should be holding  
stocks to meet the demand resulting from our ex-  
tensive advertising in the Medical and Dental Press.

*Descriptive literature for distribution supplied on application.*

GRANT BUILDING, 10, FLEET CITY ROAD, LONDON, E.C.2.